

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1639MLS

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS	1		Web Page URLs for STN Seminar Schedule - N. America
NEWS	2		"Ask CAS" for self-help around the clock
NEWS	3	SEP 01	New pricing for the Save Answers for SciFinder Wizard within STN Express with Discover!
NEWS	4	OCT 28	KOREAPAT now available on STN
NEWS	5	NOV 30	PHAR reloaded with additional data
NEWS	6	DEC 01	LISA now available on STN
NEWS	7	DEC 09	12 databases to be removed from STN on December 31, 2004
NEWS	8	DEC 15	MEDLINE update schedule for December 2004
NEWS	9	DEC 17	ELCOM reloaded; updating to resume; current-awareness alerts (SDIs) affected
NEWS	10	DEC 17	COMPUAB reloaded; updating to resume; current-awareness alerts (SDIs) affected
NEWS	11	DEC 17	SOLIDSTATE reloaded; updating to resume; current-awareness alerts (SDIs) affected
NEWS	12	DEC 17	CERAB reloaded; updating to resume; current-awareness alerts (SDIs) affected
NEWS	13	DEC 17	THREE NEW FIELDS ADDED TO IFIPAT/IFIUDB/IFICDB
NEWS	14	DEC 30	EPFULL: New patent full text database to be available on STN
NEWS	15	DEC 30	CAPLUS - PATENT COVERAGE EXPANDED
NEWS	16	JAN 03	No connect-hour charges in EPFULL during January and February 2005
NEWS	17	JAN 11	CA/CAPLUS - Expanded patent coverage to include Russia (Federal Institute of Industrial Property)
NEWS EXPRESS			JANUARY 10 CURRENT WINDOWS VERSION IS V7.01a, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 10 JANUARY 2005
NEWS HOURS			STN Operating Hours Plus Help Desk Availability
NEWS INTER			General Internet Information
NEWS LOGIN			Welcome Banner and News Items
NEWS PHONE			Direct Dial and Telecommunication Network Access to STN
NEWS WWW			CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 13:42:22 ON 20 JAN 2005

=> fil reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'REGISTRY' ENTERED AT 13:42:33 ON 20 JAN 2005

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 19 JAN 2005 HIGHEST RN 817158-90-0

DICTIONARY FILE UPDATES: 19 JAN 2005 HIGHEST RN 817158-90-0

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>

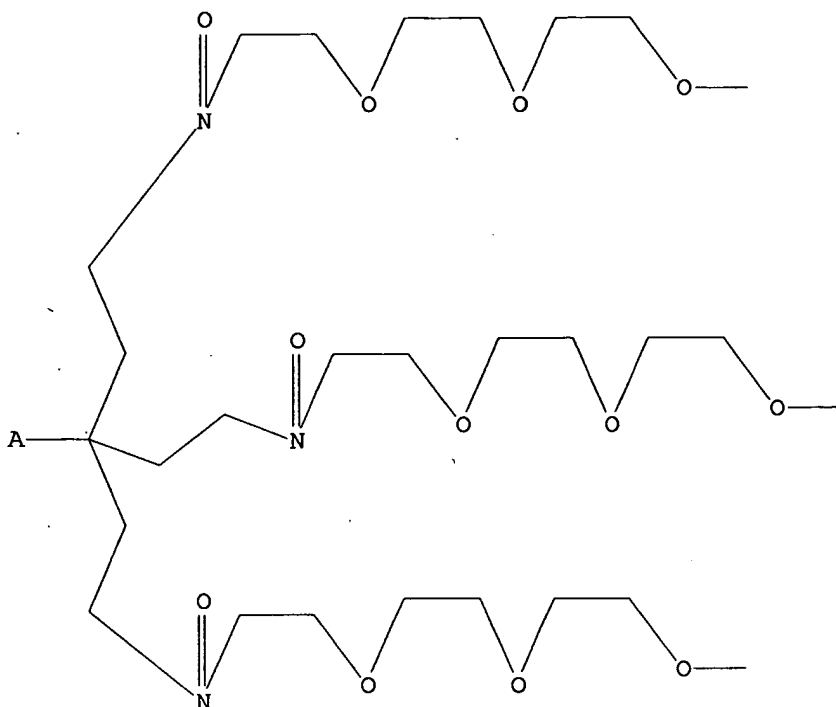
Uploading C:\Program Files\Stnexp\Queries\10161279\10049259\N=O.str

L1 STRUCTURE UPLOADED

=> d

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1 exa full

STRUCTURES CONTAINING VARIABLE NODES NOT VALID IN EXACT OR FAMILY SEARCH  
 You have requested a full structure (EXA or FAM) search on a structure containing one of the special variable-atom symbols A, M, Q, or X, or a variable group G. Only bond variability is allowed in structures for EXA or FAM searches. Variable nodes are never permitted.

=> s l1 exa

STRUCTURES CONTAINING VARIABLE NODES NOT VALID IN EXACT OR FAMILY SEARCH  
 You have requested a full structure (EXA or FAM) search on a structure containing one of the special variable-atom symbols A, M, Q, or X, or a variable group G. Only bond variability is allowed in structures for EXA or FAM searches. Variable nodes are never permitted.

=> s l1

SAMPLE SEARCH INITIATED 13:44:21 FILE 'REGISTRY'  
 SAMPLE SCREEN SEARCH COMPLETED - 0 TO ITERATE

100.0% PROCESSED 0 ITERATIONS 0 ANSWERS  
 SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
 BATCH \*\*COMPLETE\*\*  
 PROJECTED ITERATIONS: 0 TO 0  
 PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> l1

SAMPLE SEARCH INITIATED 13:44:50 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 0 TO ITERATE

100.0% PROCESSED 0 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 0 TO 0  
PROJECTED ANSWERS: 0 TO 0

L3 0 SEA SSS SAM L1

=>

Uploading C:\Program Files\Stnexp\Queries\10161279\10049259\C=O.str

L4 STRUCTURE UPLOADED

=> 11

SAMPLE SEARCH INITIATED 13:45:38 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 0 TO ITERATE

100.0% PROCESSED 0 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 0 TO 0  
PROJECTED ANSWERS: 0 TO 0

L5 0 SEA SSS SAM L1

=>

Uploading C:\Program Files\Stnexp\Queries\10161279\10049259\OCC.str

L6 STRUCTURE UPLOADED

=> 14

SAMPLE SEARCH INITIATED 13:46:56 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 439 TO ITERATE

100.0% PROCESSED 439 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 7523 TO 10037  
PROJECTED ANSWERS: 0 TO 0

L7 0 SEA SSS SAM L4

=> 14 full

FULL SEARCH INITIATED 13:47:14 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 8911 TO ITERATE

100.0% PROCESSED 8911 ITERATIONS 5 ANSWERS  
SEARCH TIME: 00.00.01

L8 5 SEA SSS FUL L4

=> 16

SAMPLE SEARCH INITIATED 13:47:40 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 1314 TO ITERATE

76.1% PROCESSED 1000 ITERATIONS 0 ANSWERS  
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 24106 TO 28454  
PROJECTED ANSWERS: 0 TO 0

L9 0 SEA SSS SAM L6

=> 16 full  
FULL SEARCH INITIATED 13:47:59 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 26006 TO ITERATE

100.0% PROCESSED 26006 ITERATIONS 9 ANSWERS  
SEARCH TIME: 00.00.01

L10 9 SEA SSS FUL L6

=> 11 full  
FULL SEARCH INITIATED 13:48:26 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 9 TO ITERATE

100.0% PROCESSED 9 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

L11 0 SEA SSS FUL L1

=> fil caplus  
COST IN U.S. DOLLARS  
FULL ESTIMATED COST

	SINCE FILE ENTRY	TOTAL SESSION
	487.00	487.21

FILE 'CAPLUS' ENTERED AT 13:48:38 ON 20 JAN 2005  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 20 Jan 2005 VOL 142 ISS 4  
FILE LAST UPDATED: 19 Jan 2005 (20050119/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d his

(FILE 'HOME' ENTERED AT 13:42:22 ON 20 JAN 2005)

FILE 'REGISTRY' ENTERED AT 13:42:33 ON 20 JAN 2005

```
L1          STRUCTURE UPLOADED
L2          0 S L1
L3          0 L1
L4          STRUCTURE UPLOADED
L5          0 L1
L6          STRUCTURE UPLOADED
L7          0 L4
L8          5 L4 FULL
L9          0 L6
L10         9 L6 FULL
L11         0 L1 FULL
```

FILE 'CAPLUS' ENTERED AT 13:48:38 ON 20 JAN 2005

=> 18

L12 2 L8

=> d fbib abs histr l12 1-2

'HISTR' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'

The following are valid formats:

```
ABS ----- GI and AB
ALL ----- BIB, AB, IND, RE
APPS ----- AI, PRAI
BIB ----- AN, plus Bibliographic Data and PI table (default)
CAN ----- List of CA abstract numbers without answer numbers
CBIB ----- AN, plus Compressed Bibliographic Data
DALL ----- ALL, delimited (end of each field identified)
DMAX ----- MAX, delimited for post-processing
FAM ----- AN, PI and PRAI in table, plus Patent Family data
FBIB ----- AN, BIB, plus Patent FAM
IND ----- Indexing data
IPC ----- International Patent Classifications
MAX ----- ALL, plus Patent FAM, RE
PATS ----- PI, SO
SAM ----- CC, SX, TI, ST, IT
SCAN ----- CC, SX, TI, ST, IT (random display, no answer numbers;
              SCAN must be entered on the same line as the DISPLAY,
              e.g., D SCAN or DISPLAY SCAN)
STD ----- BIB, IPC, and NCL

IABS ----- ABS, indented with text labels
IALL ----- ALL, indented with text labels
IBIB ----- BIB, indented with text labels
IMAX ----- MAX, indented with text labels
ISTD ----- STD, indented with text labels

OBIB ----- AN, plus Bibliographic Data (original)
OIBIB ----- OBIB, indented with text labels

SBIB ----- BIB, no citations
SIBIB ----- IBIB, no citations

HIT ----- Fields containing hit terms
HITIND ----- IC, ICA, ICI, NCL, CC and index field (ST and IT)
              containing hit terms
HITRN ----- HIT RN and its text modification
HITSTR ----- HIT RN, its text modification, its CA index name, and
              its structure diagram
```

HITSEQ ----- HIT RN, its text modification, its CA index name, its structure diagram, plus NTE and SEQ fields  
 FHITSTR ----- First HIT RN, its text modification, its CA index name, and its structure diagram  
 FHITSEQ ----- First HIT RN, its text modification, its CA index name, its structure diagram, plus NTE and SEQ fields  
 KWIC ----- Hit term plus 20 words on either side  
 OCC ----- Number of occurrence of hit term and field in which it occurs

To display a particular field or fields, enter the display field codes. For a list of the display field codes, enter HELP DFIELDS at an arrow prompt (=>). Examples of formats include: TI; TI,AU; BIB,ST; TI,IND; TI,SO. You may specify the format fields in any order and the information will be displayed in the same order as the format specification.

All of the formats (except for SAM, SCAN, HIT, HITIND, HITRN, HITSTR, FHITSTR, HITSEQ, FHITSEQ, KWIC, and OCC) may be used with DISPLAY ACC to view a specified Accession Number.  
 ENTER DISPLAY FORMAT (BIB):end

=> d his

(FILE 'HOME' ENTERED AT 13:42:22 ON 20 JAN 2005)

FILE 'REGISTRY' ENTERED AT 13:42:33 ON 20 JAN 2005

L1 STRUCTURE UPLOADED  
 L2 0 S L1  
 L3 0 L1  
 L4 STRUCTURE UPLOADED  
 L5 0 L1  
 L6 STRUCTURE UPLOADED  
 L7 0 L4  
 L8 5 L4 FULL  
 L9 0 L6  
 L10 9 L6 FULL  
 L11 0 L1 FULL

FILE 'CAPLUS' ENTERED AT 13:48:38 ON 20 JAN 2005

L12 2 L8

=> d fbib abs hitstr l12 1-2

L12 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN  
 AN 2004:799910 CAPLUS  
 DN 142:6919  
 TI Synthesis of Water-Soluble, Ester-Terminated Dendrons and Dendrimers Containing Internal PEG Linkages  
 AU Newkome, George R.; Kotta, Kishore K.; Mishra, Amaresh; Moorefield, Charles N.  
 CS Departments of Polymer Science and Chemistry, Department of Chemistry, Maurice Morton Institute of Polymer Science, The University of Akron, Akron, OH, 44325-4717, USA  
 SO Macromolecules (2004), 37(22), 8262-8268  
 CODEN: MAMOBX; ISSN: 0024-9297  
 PB American Chemical Society  
 DT Journal  
 LA English  
 AB Dendrimers up to three generations, possessing internal PEG units within the branching framework, were synthesized by a convergent approach via the reaction of amine-based dendrons with 6,6-bis(4-chlorocarbonyl-2-oxabutyl)-4,8-dioxaundecane-1,11-dicarbonyl chloride. These new constructs were

fully characterized, shown to exhibit good solubilities in organic as well as aqueous solvents, and demonstrated to solubilize lithium triflate salts in nonaq. environments, such as chloroform.

IT 797037-55-9P 797037-56-0P 797037-57-1P

797037-58-2P

RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

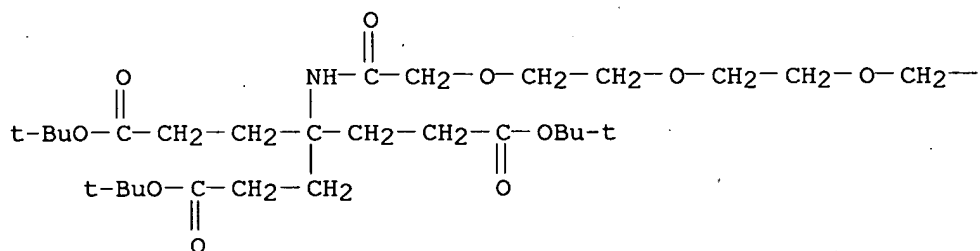
(dendrons; synthesis and solubility of water-soluble, ester-terminated dendrons

and dendrimers containing internal PEG linkages)

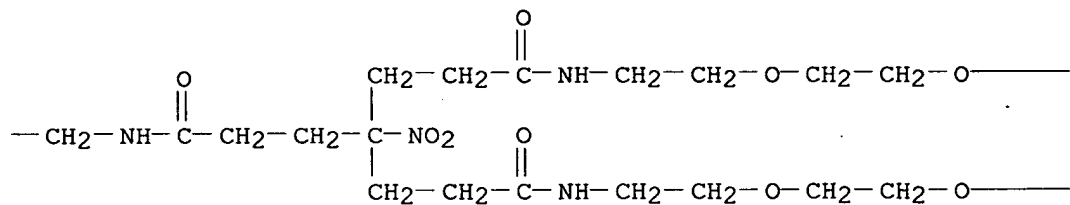
RN 797037-55-9 CAPLUS

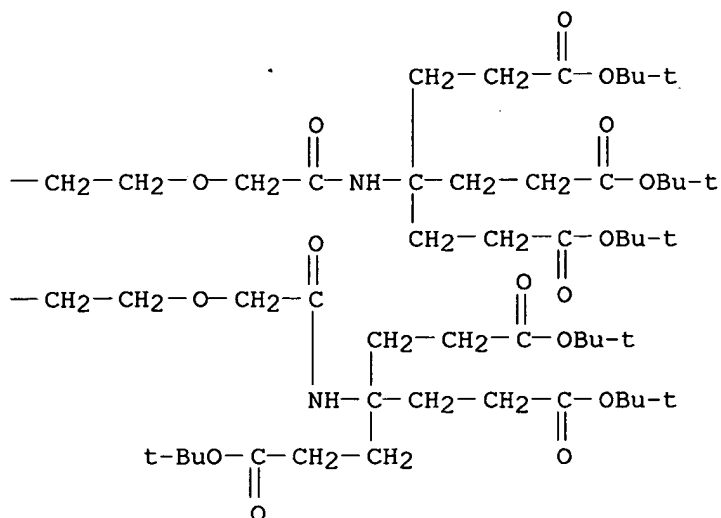
CN 8,11,14,28,31,34-Hexaoxa-5,17,25,37-tetraazahentetracontanedioic acid, 21-[17,17-bis[3-(1,1-dimethylethoxy)-3-oxopropyl]-22,22-dimethyl-3,15,20-trioxo-7,10,13,21-tetraoxa-4,16-diazatricos-1-yl]-4,4,38,38-tetrakis[3-(1,1-dimethylethoxy)-3-oxopropyl]-21-nitro-6,18,24,36-tetraoxo-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

PAGE 1-A



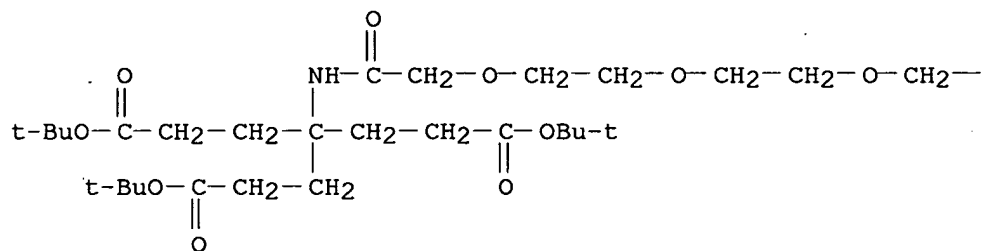
PAGE 1-B

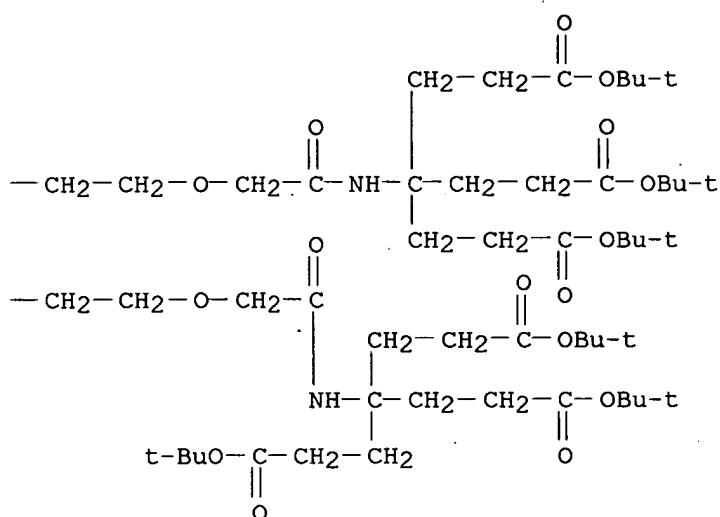
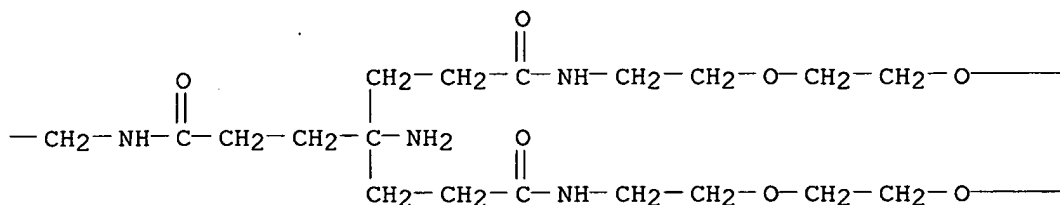




RN 797037-56-0 CAPLUS

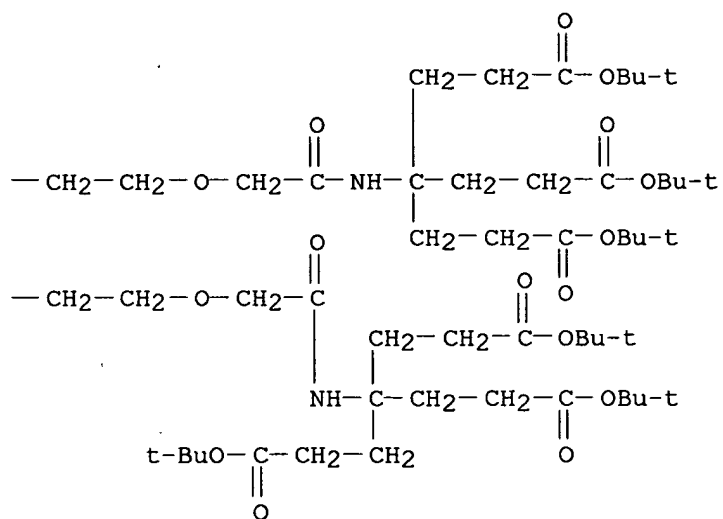
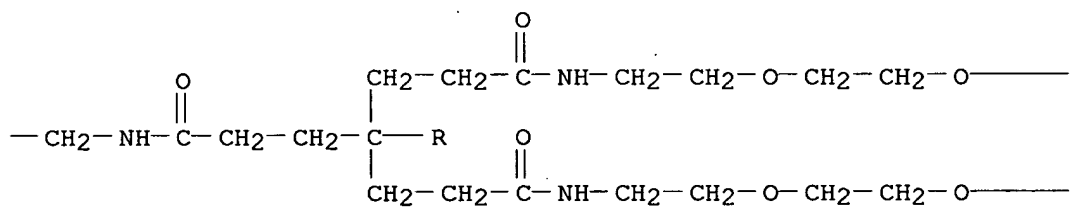
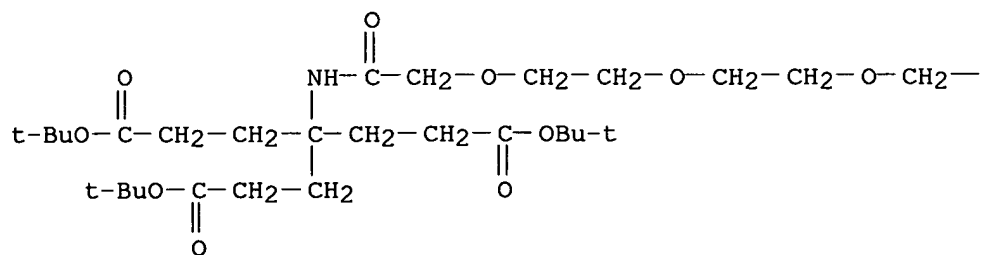
CN 8,11,14,28,31,34-Hexaoxa-5,17,25,37-tetraazahentetracontanedioic acid,  
 21-amino-21-[17,17-bis[3-(1,1-dimethylethoxy)-3-oxopropyl]-22,22-dimethyl-  
 3,15,20-trioxo-7,10,13,21-tetraoxa-4,16-diazatricos-1-yl]-4,4,38,38-  
 tetrakis[3-(1,1-dimethylethoxy)-3-oxopropyl]-6,18,24,36-tetraoxo-,  
 bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

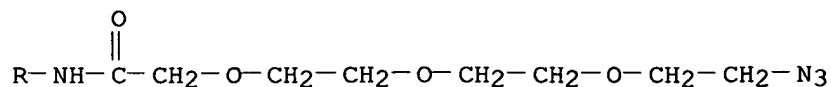




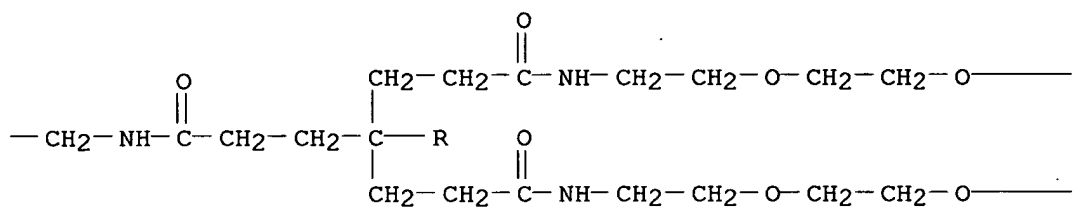
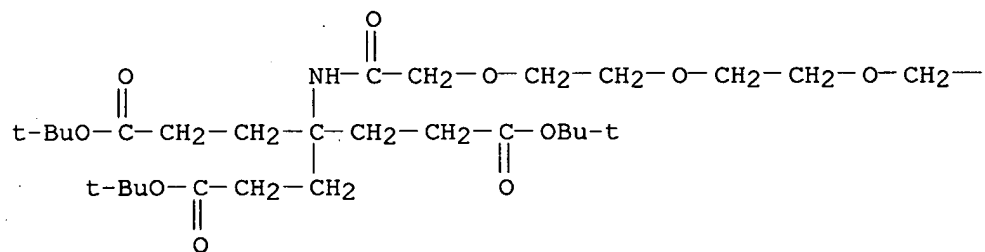
RN 797037-57-1 CAPLUS

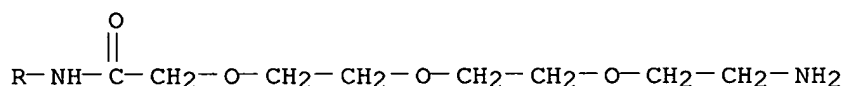
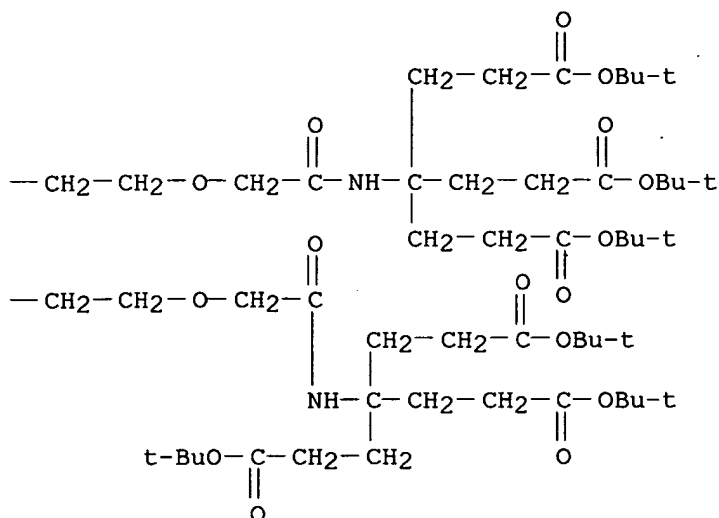
CN 8,11,14,28,31,34-Hexaoxa-5,17,25,37-tetraazahentetracontanedioic acid,  
 21-[[[2-[2-(2-azidoethoxy)ethoxy]ethoxy]acetyl]amino]-21-[17,17-bis[3-(1,1-dimethylethoxy)-3-oxopropyl]-22,22-dimethyl-3,15,20-trioxo-7,10,13,21-tetraoxa-4,16-diazatricos-1-yl]-4,4,38,38-tetrakis[3-(1,1-dimethylethoxy)-3-oxopropyl]-6,18,24,36-tetraoxo-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)





RN 797037-58-2 CAPLUS  
 CN 8,11,14,28,31,34-Hexaoxa-5,17,25,37-tetraazahentetracontanedioic acid,  
 21-[[[2-[2-(2-aminoethoxy)ethoxy]ethoxy]acetyl]amino]-21-[17,17-bis[3-(1,1-  
 dimethylethoxy)-3-oxopropyl]-22,22-dimethyl-3,15,20-trioxo-7,10,13,21-  
 tetraoxa-4,16-diazatricos-1-yl]-4,4,38,38-tetrakis[3-(1,1-dimethylethoxy)-  
 3-oxopropyl]-6,18,24,36-tetraoxo-, bis(1,1-dimethylethyl) ester (9CI) (CA  
 INDEX NAME)





RE.CNT 109 THERE ARE 109 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2001:246486 CAPLUS

DN 135:162073

TI Trivalent  $\alpha$ -D-mannoside clusters as inhibitors of type-1 fimbriae-mediated adhesion of Escherichia coli: structural variation and biotinylation

AU Lindhorst, Thisbe K.; Kotter, Sven; Krallmann-Wenzel, Ulrike; Ehlers, Stefan

CS Institute of Organic Chemistry, Christiana Albertina University of Kiel, Kiel, D-24098, Germany

SO Journal of the Chemical Society, Perkin Transactions 1 (2001), (8), 823-831

CODEN: JCSPCE; ISSN: 1472-7781

PB Royal Society of Chemistry

DT Journal

LA English

AB Structural modifications of trivalent cluster mannosides are presented to further elucidate the ligand preferences of the type-1 fimbrial lectin of Escherichia coli. Two types of variations are performed, either regarding the aglycon part of cluster mannosides or altering the spacer lengths of mannosyl clusters. Biotinylation of the cluster mannoside with the highest affinity to the type-1 fimbrial lectin is also shown. Testing of the inhibitory potencies of the synthesized cluster glycosides as inhibitors of mannose-specific (type-1 fimbriae-mediated) binding of E. coli to mannan in an ELISA suggests that a structural preorganization can be favorably combined with greater spacer flexibility.

IT 353737-50-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological

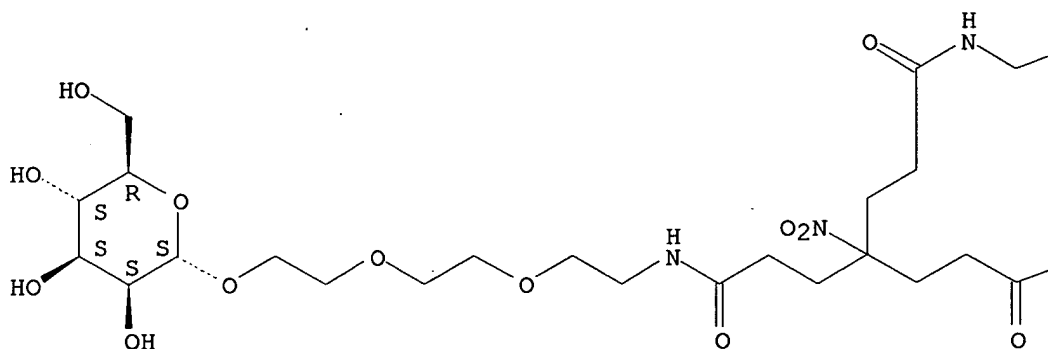
study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (trivalent  $\alpha$ -D-mannoside clusters as inhibitors of type-1 fimbriae-mediated mannose-specific adhesion of Escherichia coli in relation to structural variation and biotinylation)

RN 353737-50-5 CAPLUS

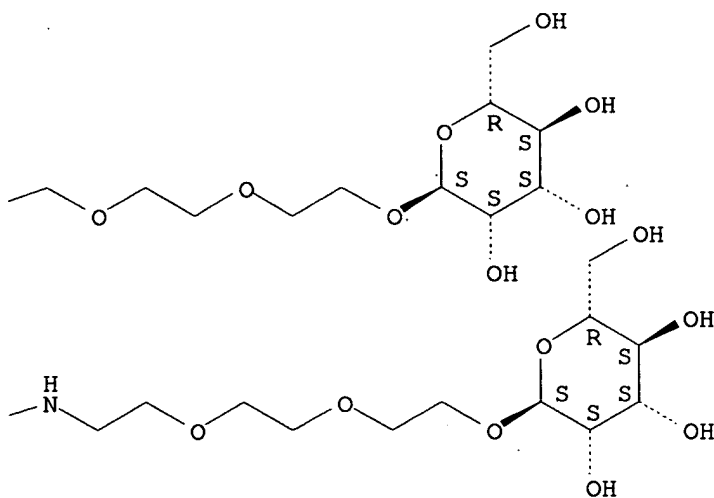
CN Heptanediamide, N,N'-bis[2-[2-[2-( $\alpha$ -D-mannopyranosyloxy)ethoxy]ethoxy]ethyl]-4-[3-[2-[2-[2-( $\alpha$ -D-mannopyranosyloxy)ethoxy]ethoxy]ethyl]amino]-3-oxopropyl]-4-nitro- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

PAGE 1-A



PAGE 1-B



RE.CNT 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> 110

=&gt; d fbib abs hitstr l13 1-9

L13 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:381160 CAPLUS

DN 138:347964

TI Dendritic iron(III) porphyrins with a tethered axial imidazole ligand as new model compounds for heme-proteins

AU Diederich, Francois; Weyermann, Philipp

CS Lab. fuer Organische Chem., ETH-Zentrum, Zurich, CH-8092, Switz.

SO Polymeric Materials Science and Engineering (2001), 84, 168-169

CODEN: PMSEDG; ISSN: 0743-0515

PB American Chemical Society

DT Journal

LA English

OS CASREACT 138:347964

AB Three Fe complexes with porphyrins having a imidazolylhexyloxy strap and modified with triethyleneglycol monoethyl ether functionalized dendrons were prepared These dendritic Fe porphyrins were tested as olefin epoxidn. catalysts amd sulfide oxidation catalysts.

IT 253604-43-2

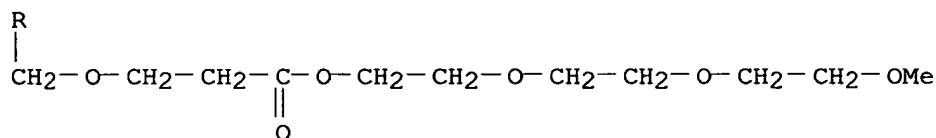
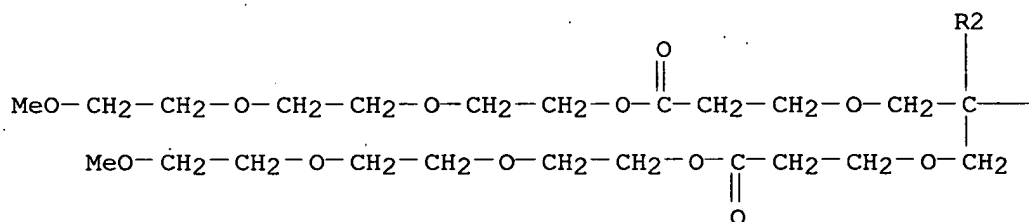
RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation as oxidation/epoxidn. catalysts for sulfides/olefins)

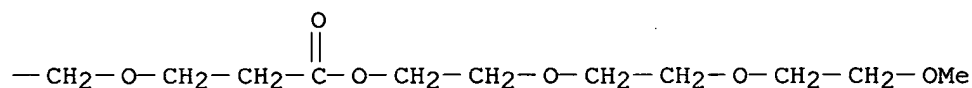
RN 253604-43-2 CAPLUS

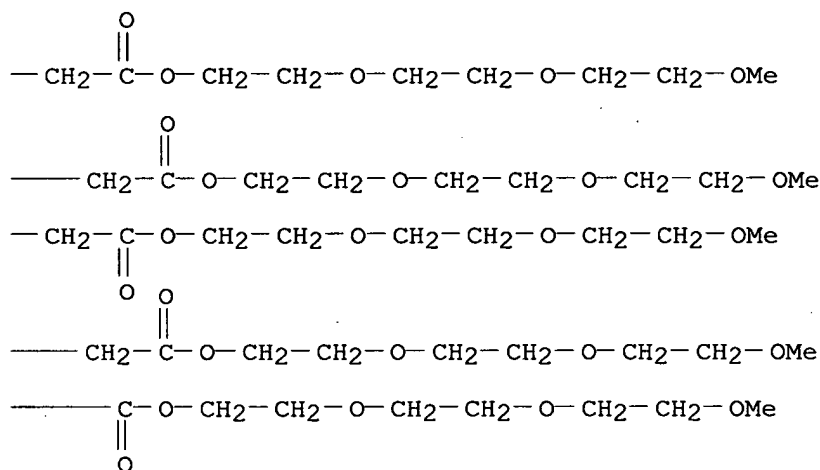
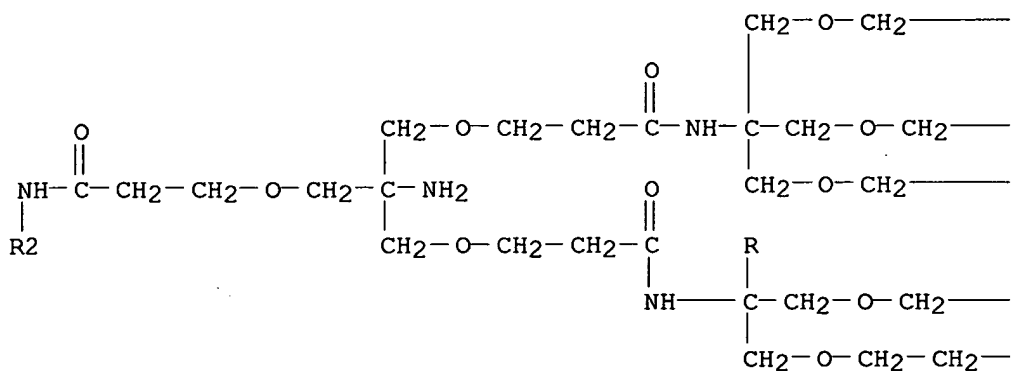
CN 4,11,15,22-Tetraoxa-7,19-diazapentacosanedioic acid, 13-amino-13-[5,12-dioxo-7,7-bis(5-oxo-2,6,9,12,15-pentaoxahexadec-1-yl)-2,9,13,16,19,22-hexaoxa-6-azatricos-1-yl]-8,18-dioxo-6,6,20,20-tetrakis(5-oxo-2,6,9,12,15-pentaoxahexadec-1-yl)-, bis[2-[2-(2-methoxyethoxy)ethoxy]ethyl] ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B





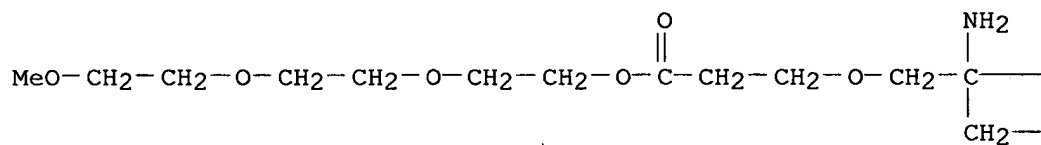
IT 247941-83-9

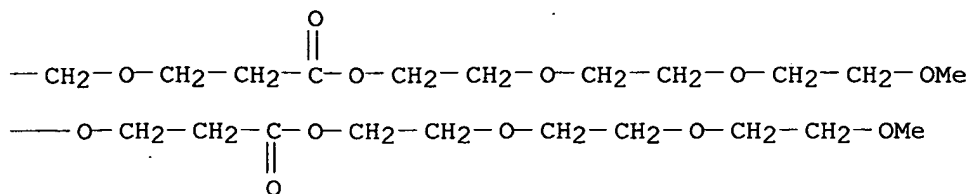
RL: RCT (Reactant); RACT (Reactant or reagent)

(reactant for preparation of iron complexes with porphyrins having imidazolylhexyloxy tether and triethyleneglycol functionalized dendrons)

RN 247941-83-9 CAPLUS

CN 2,5,8,11,15,19-Hexaoxadocosan-22-oic acid, 17-amino-12-oxo-17-(5-oxo-2,6,9,12,15-pentaoxahexadec-1-yl)-, 2-[2-(2-methoxyethoxy)ethoxy]ethyl ester (9CI) (CA INDEX NAME)



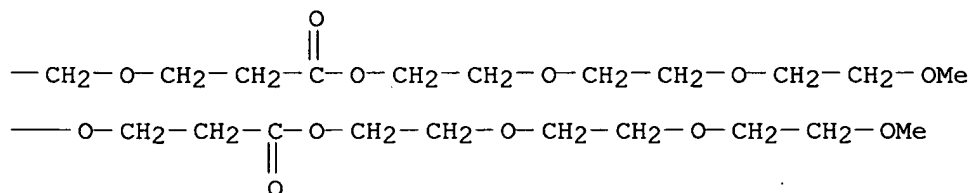
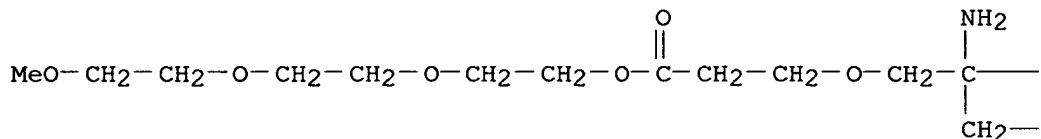


RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

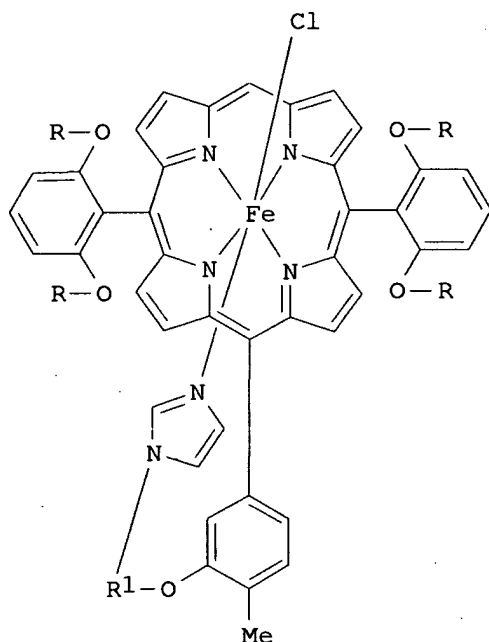
L13 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2002:316512 CAPLUS  
DN 137:74963  
TI Supramolecular chemistry of dendrimers with functional cores  
AU Diederich, Francois; Felber, Beatrice  
CS Laboratorium fur Organische Chemie, Eidgenossische Technische Hochschule-Honggerberg, HCI, Zurich, CH-8093, Switz.  
SO Proceedings of the National Academy of Sciences of the United States of America (2002), 99(8), 4778-4781  
CODEN: PNASA6; ISSN: 0027-8424  
PB National Academy of Sciences  
DT Journal  
LA English  
AB Dendritic microenvironments are analogous to local environments created within protein superstructures. Correspondingly, properties of functional cores such as mol. recognition and catalytic activity are profoundly influenced by the surrounding dendritic branches.  
IT **440362-83-4**  
RL: BSU (Biological study, unclassified); BIOL (Biological study) (dendritic; supramol. chemical of dendrimers with functional cores)  
RN 440362-83-4 CAPLUS  
CN 2,5,8,11,15,19-Hexaoxadocosan-22-oic acid, 17-amino-12-oxo-17-(5-oxo-2,6,9,12,15-pentaoxahexadec-1-yl)-, 2-[2-(2-methoxyethoxy)ethoxy]ethyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 247941-83-9  
CMF C34 H65 N O18



L13 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2002:218906 CAPLUS  
DN 136:394832  
TI Dendritic iron porphyrins with a tethered axial ligand as new model compounds for heme monooxygenases  
AU Weyermann, Philipp; Diederich, Francois  
CS Laboratorium fur Organische Chemie, ETH-Honggerberg, HCI, Zurich, CH-8093, Switz.  
SO Helvetica Chimica Acta (2002), 85(2), 599-617  
CODEN: HCACAV; ISSN: 0018-019X  
PB Verlag Helvetica Chimica Acta  
DT Journal  
LA English  
OS CASREACT 136:394832  
GI



I

AB The novel Fe(III) porphyrin dendrimers of generation zero ([1·Fe]Cl), one ([2·Fe]Cl), and two ([3·Fe]Cl) ([1·Fe]Cl), ([2·Fe]Cl), and ([3·Fe]Cl) = I (R = CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>CONHR<sub>2</sub> (R<sub>2</sub> = CH<sub>2</sub>CH<sub>2</sub>OCH<sub>2</sub>CH<sub>2</sub>OCH<sub>2</sub>CH<sub>2</sub>OMe (R<sub>3</sub>), R<sub>2</sub> = C{CH<sub>2</sub>OCH<sub>2</sub>CH<sub>2</sub>CO<sub>2</sub>R<sub>3</sub>}<sub>3</sub> (R<sub>4</sub>) and R<sub>2</sub> = C{CH<sub>2</sub>OCH<sub>2</sub>CH<sub>2</sub>CONHR<sub>4</sub>}<sub>3</sub>, resp.); R<sub>1</sub> = (CH<sub>2</sub>)<sub>6</sub>) were prepared as models of heme monooxygenases. They feature controlled axial ligation at the Fe center by one imidazole tethered to the porphyrin core and possess a vacant coordination site available for ligand binding and catalysis. The high purity of the dendrimers and the absence of structural defects was demonstrated by matrix-assisted laser-desorption-ionization time-of-flight (MALDI-TOF) mass spectrometry. The electronic properties of the FeIII porphyrin dendrimers and comparison compds. [4·Fe]Cl (4 = I (R = CH<sub>2</sub>CH<sub>2</sub>CO<sub>2</sub>Et)) and [12·Fe(1,2-Me<sub>2</sub>Im)]Cl (12 = 5,15-bis(bis(ethoxycarbonylethoxy)phenyl)porphyrinate; 1,2-Me<sub>2</sub>Im = 1,2-dimethylimidazole) were studied by UV/visible and EPR

(electronic paramagnetic resonance) spectroscopy, as well as by measurements of the magnetic moments by the Evans-Scheffold method. Epoxidn. of olefins and oxidation of sulfides to sulfoxides, catalyzed by the new dendritic metalloporphyrins, were studied in CH<sub>2</sub>Cl<sub>2</sub> with iodosylbenzene as the oxidant. The total turnover nos. increase with the size of the dendrimer, due to improved catalyst stability at higher dendritic generations. The 2nd-generation complex [3·FeIII]Cl was, therefore, the most efficient catalyst in the series, despite the fact that its active site is considerably hindered by the encapsulation inside the sterically demanding, fluctuating dendritic wedges. Very high product selectivities were observed in all oxidation reactions, regardless of dendrimer generation.

IT 247941-83-9 253604-43-2

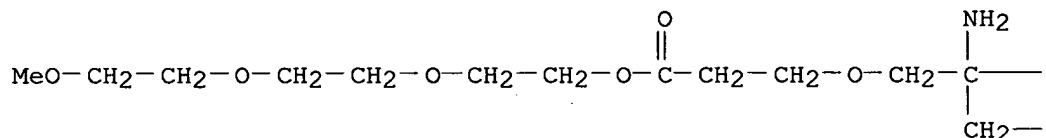
RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation and reactant for preparation of iron porphyrin based dendritic complexes)

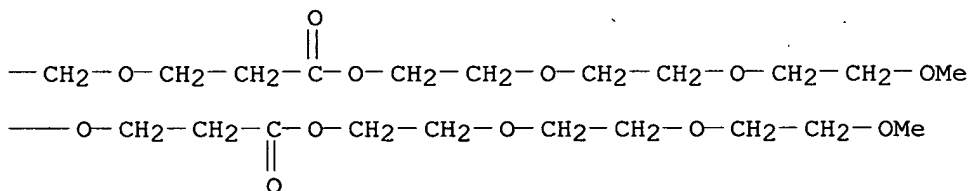
RN 247941-83-9 CAPLUS

CN 2,5,8,11,15,19-Hexaoxadocosan-22-oic acid, 17-amino-12-oxo-17-(5-oxo-2,6,9,12,15-pentaoxahexadec-1-yl)-, 2-[2-(2-methoxyethoxy)ethoxy]ethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



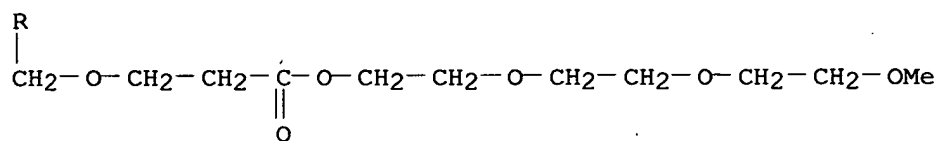
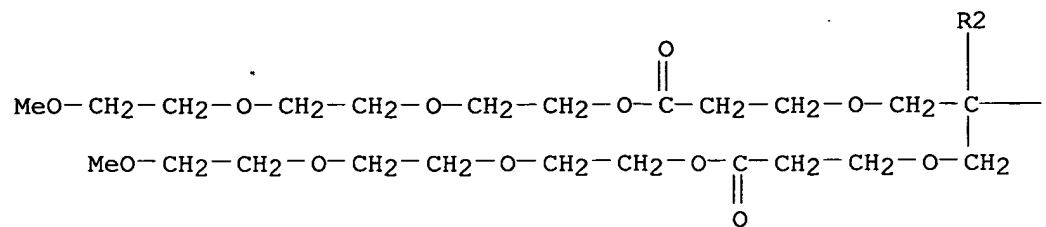
PAGE 1-B



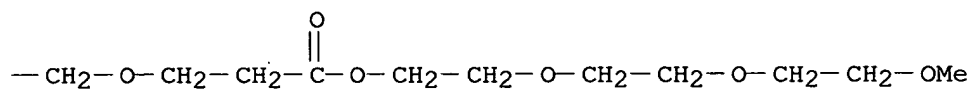
RN 253604-43-2 CAPLUS

CN 4,11,15,22-Tetraoxa-7,19-diazapentacosanedioic acid, 13-amino-13-[5,12-dioxo-7,7-bis(5-oxo-2,6,9,12,15-pentaoxahexadec-1-yl)-2,9,13,16,19,22-hexaoxa-6-azatricos-1-yl]-8,18-dioxo-6,6,20,20-tetrakis(5-oxo-2,6,9,12,15-pentaoxahexadec-1-yl)-, bis[2-[2-(2-methoxyethoxy)ethoxy]ethyl] ester (9CI) (CA INDEX NAME)

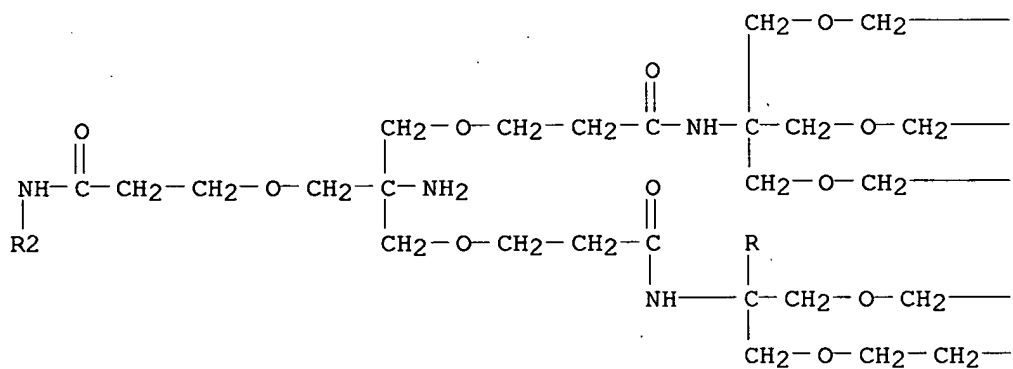
PAGE 1-A

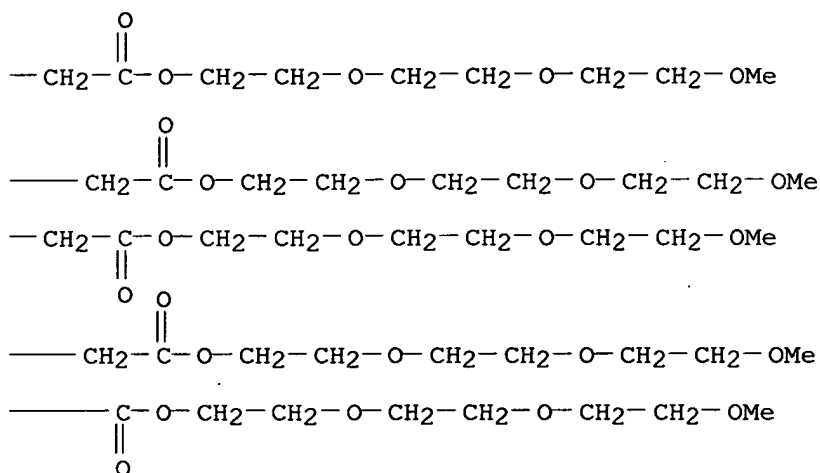


PAGE 1-B



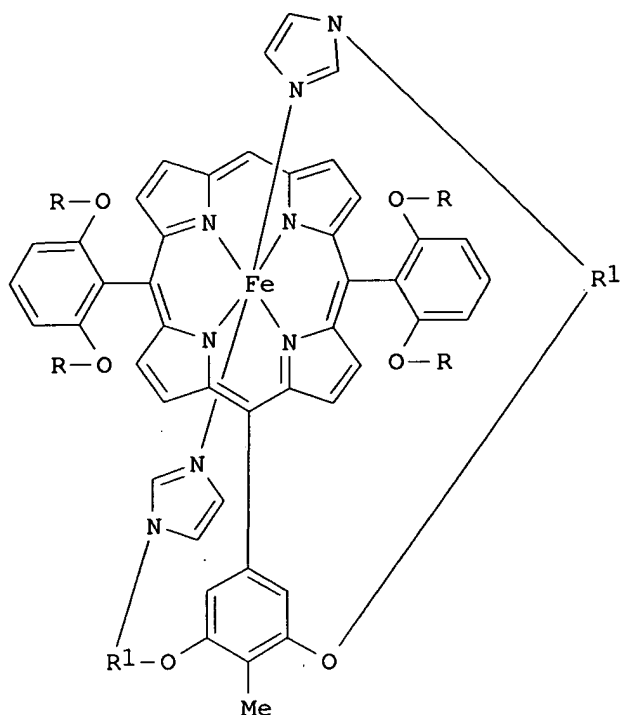
PAGE 2-A





RE.CNT 81      THERE ARE 81 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2002:218905 CAPLUS  
DN 136:394831  
TI Dendritic iron porphyrins with tethered axial ligands: new model compounds  
for cytochromes  
AU Weyermann, Philipp; Diederich, Francois; Gisselbrecht, Jean-Paul; Boudon,  
Corinne; Gross, Maurice  
CS Laboratorium fur Organische Chemie, ETH-Honggerberg, HCI, Zurich, CH-8093,  
Switz.  
SO Helvetica Chimica Acta (2002), 85(2), 571-598  
CODEN: HCACAV; ISSN: 0018-019X  
PB Verlag Helvetica Chimica Acta  
DT Journal  
LA English  
OS CASREACT 136:394831  
GI



AB The novel dendritic Fe porphyrins of generation zero ( $[1\cdot\text{Fe}]\text{Cl}$ ), one ( $[2\cdot\text{Fe}]\text{Cl}$ ), and two ( $[3\cdot\text{Fe}]\text{Cl}$ ) ( $[1\cdot\text{Fe}]^+$ , ( $[2\cdot\text{Fe}]^+$ ) and ( $[3\cdot\text{Fe}]^+ = \text{I}$ ,  $\text{R} = \text{CH}_2\text{CH}_2\text{CH}_2\text{CONHR}_2$  ( $\text{R}_2 = \text{CH}_2\text{CH}_2\text{OCH}_2\text{CH}_2\text{OCH}_2\text{CH}_2\text{OMe}$  ( $\text{R}_3$ ),  $\text{R}_2 = \text{C}\{\text{CH}_2\text{OCH}_2\text{CH}_2\text{COR}_3\}$  ( $\text{R}_4$ ) and  $\text{R}_2 = \text{C}\{\text{CH}_2\text{OCH}_2\text{CH}_2\text{CONHR}_4\}$ , resp.);  $\text{R} = (\text{CH})_6$ ) were prepared as models of cytochromes. They feature controlled axial ligation at the Fe center by two imidazoles tethered to the porphyrin core. Similar to the core compound  $[4\cdot\text{Fe}]\text{Cl}$  ( $[4\cdot\text{Fe}]^+ = \text{I}$ ,  $\text{R} = \text{CH}_2\text{HC}_2\text{CH}_2\text{CO}_2\text{Et}$ ), they are six-coordinate low-spin complexes as demonstrated by UV/visible and EPR spectroscopy, as well as measurements of the magnetic moments by the Evans-Scheffold method. The coordination environment does not change upon reduction to the corresponding Fe(II) complexes. The dendritic Fe porphyrins were purified by size-exclusion chromatog. and shown by matrix-assisted laser-desorption-ionization mass spectrometry (MALDI-TOF-MS) to be free of structural defects. With their triethyleneglycol monomethyl ether surface groups, the three dendritic mimics are soluble in solvents of widely differing polarity. Electrochem. studies and optical redox titrns. revealed that the potential of the Fe(III)/Fe(II) couple in  $\text{CH}_2\text{Cl}_2$ , MeCN, and  $\text{H}_2\text{O}$  shifts strongly to more pos. values (by  $\leq 380$  mV) with increasing dendritic generation. The redox potential of the 2nd-generation complex  $[3\cdot\text{Fe}]\text{Cl}$  is, within exptl. error, identical in all three solvents, which clearly demonstrates that the dendritic branching creates a unique local microenvironment around the isolated electroactive core. Whereas, in the organic solvents, the largest anodic potential shift is measured upon changing from generation zero to one, the largest shift in  $\text{H}_2\text{O}$  occurs only at the level of the 2nd generation, when the dendritic superstructure is sufficiently dense to prevent access of bulk solvent to the electroactive core.

IT 253604-43-2P 425603-97-0P

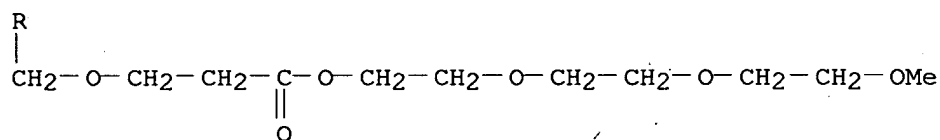
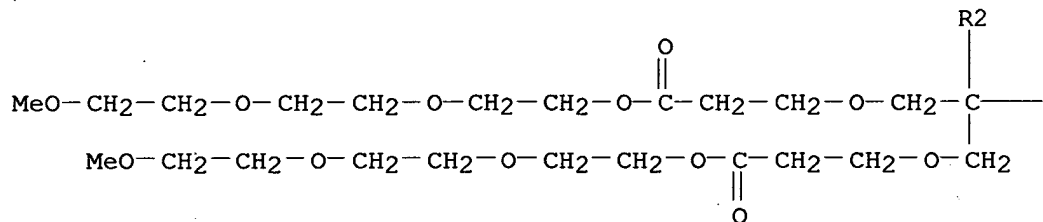
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reactant for preparation of iron porphyrin dendritic based imidazole tethered complexes)

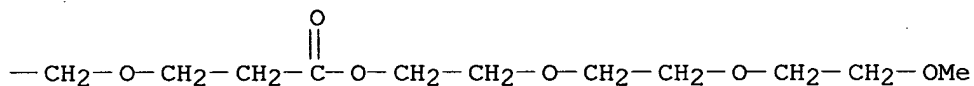
RN 253604-43-2 CAPLUS

CN 4,11,15,22-Tetraoxa-7,19-diazapentacosanedioic acid, 13-amino-13-[5,12-dioxo-7,7-bis(5-oxo-2,6,9,12,15-pentaoxahexadec-1-yl)-2,9,13,16,19,22-hexaoxa-6-azatricos-1-yl]-8,18-dioxo-6,6,20,20-tetrakis(5-oxo-2,6,9,12,15-pentaoxahexadec-1-yl)-, bis[2-[2-(2-methoxyethoxy)ethoxy]ethyl] ester (9CI) (CA INDEX NAME)

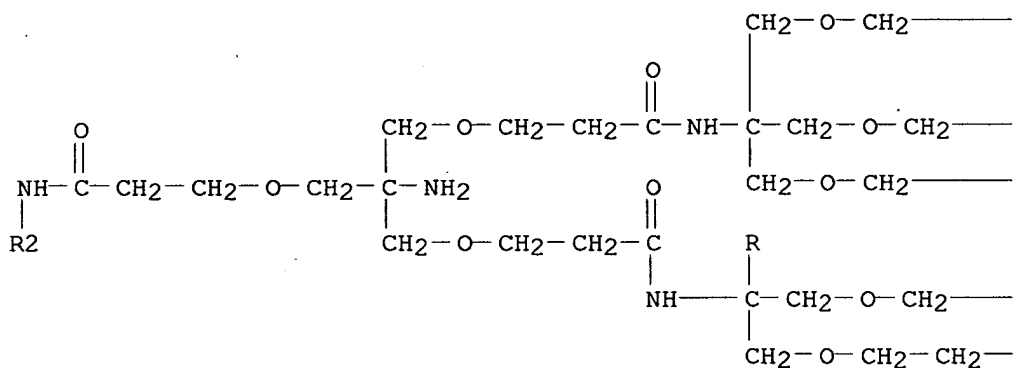
PAGE 1-A

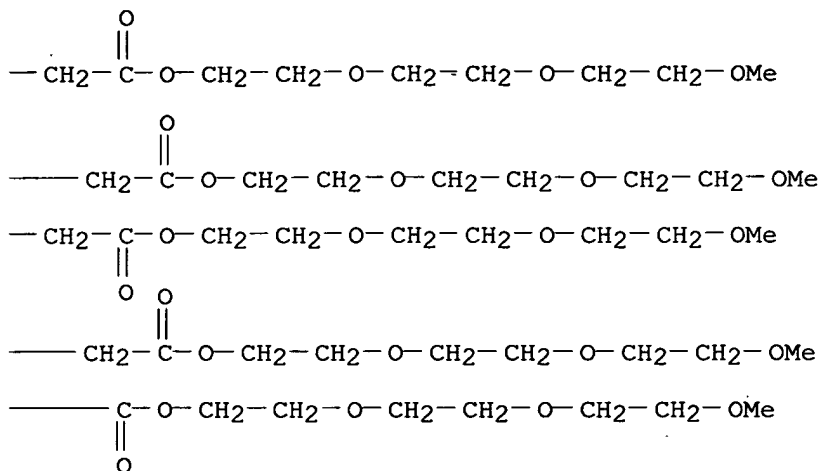


PAGE 1-B



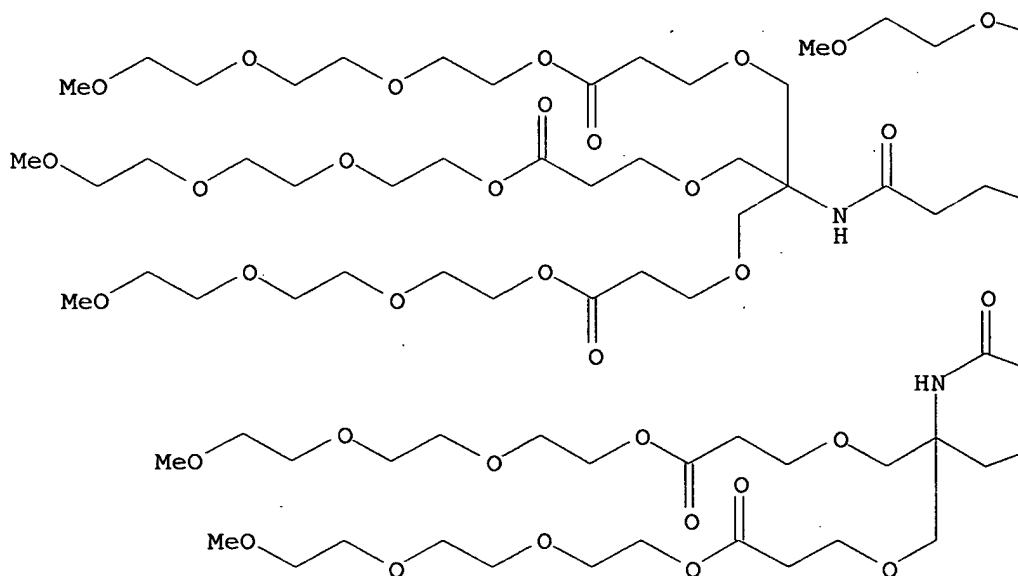
PAGE 2-A

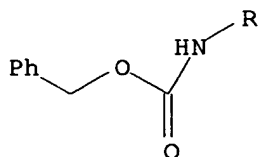
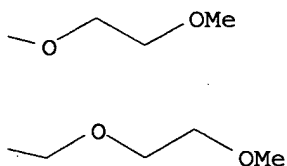
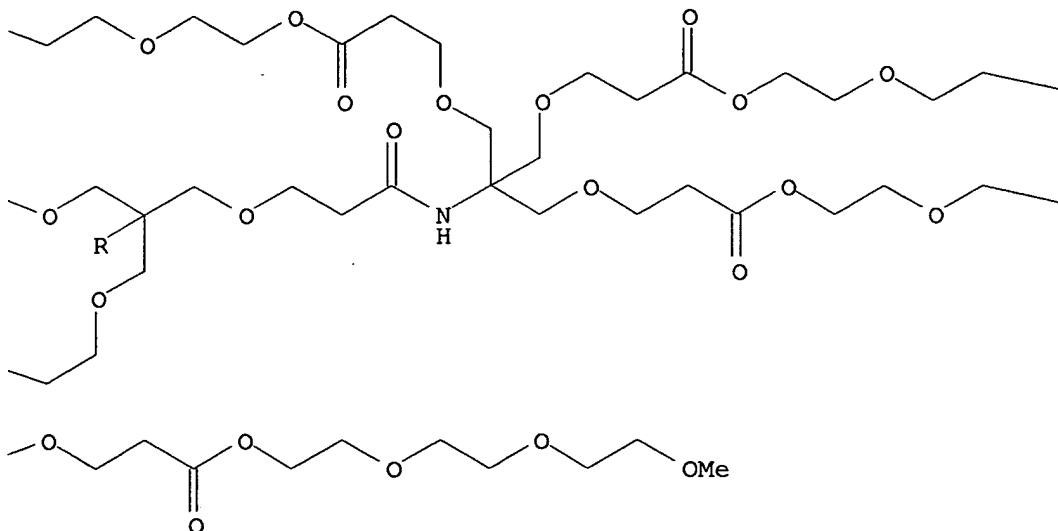




RN 425603-97-0 CAPLUS

CN 4,11,15,22-Tetraoxa-7,19-diazapentacosanedioic acid, 13-[5,12-dioxo-7,7-bis(5-oxo-2,6,9,12,15-pentaoxahexadec-1-yl)-2,9,13,16,19,22-hexaoxa-6-azatricos-1-yl]-8,18-dioxo-6,6,20,20-tetrakis(5-oxo-2,6,9,12,15-pentaoxahexadec-1-yl)-13-[[ (phenylmethoxy) carbonyl] amino]-, bis[2-[2-(2-methoxyethoxy)ethoxy]ethyl] ester (9CI) (CA INDEX NAME)





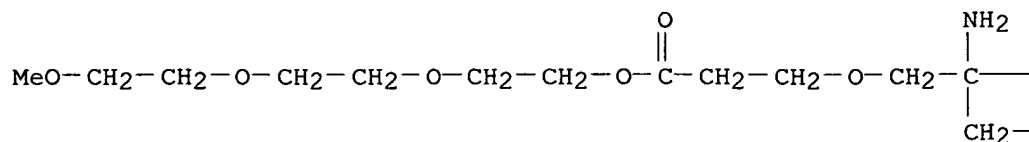
IT 247941-83-9

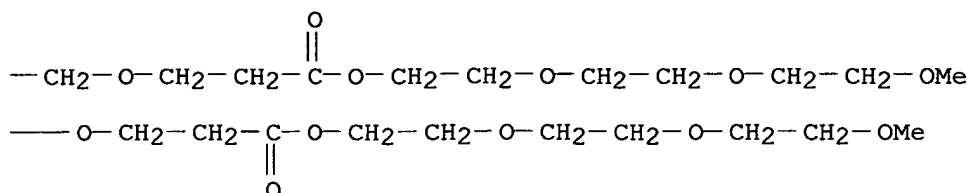
RL: RCT (Reactant); RACT (Reactant or reagent)

(reactant for preparation of iron porphyrin dendritic based imidazole tethered complexes)

RN 247941-83-9 CAPLUS

CN 2,5,8,11,15,19-Hexaoxadocosan-22-oic acid, 17-amino-12-oxo-17-(5-oxo-2,6,9,12,15-pentaoxahehexadec-1-yl)-, 2-[2-(2-methoxyethoxy)ethoxy]ethyl ester (9CI) (CA INDEX NAME)





RE.CNT 89 THERE ARE 89 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:32010 CAPLUS

DN 136:238297

TI Ferrocene Encapsulated within Symmetric Dendrimers: A Deeper Understanding of Dendritic Effects on Redox Potential

AU Stone, Diane L.; Smith, David K.; McGrail, P. Terry

CS Department of Chemistry, University of York, Heslington York, YO10 5DD, UK

SO Journal of the American Chemical Society (2002), 124(5), 856-864

CODEN: JACSAT; ISSN: 0002-7863

PB American Chemical Society

DT Journal

LA English

AB Ferrocene has been encapsulated within a sym. ether-amide dendritic shell and its redox potential monitored in a variety of solvents. The dendritic effect generated by the branched shell is different in different solvents. In less polar, non hydrogen bond donor solvents, attachment of the branched shell to ferrocene increases its  $E_{1/2}$ , indicating that oxidation to ferrocenium (charge buildup) becomes thermodynamically hindered by the dendrimer, a result explained by the dendrimer providing a less polar medium than that of the surrounding electrolyte solution. The effect of electrolyte concentration on redox potential was also investigated, and it was shown that the concentration of "innocent" electrolyte has a significant effect on the redox potential by increasing the overall polarity of the surrounding medium. Dendritic destabilization of charge buildup is in agreement with the majority of reported dendritic effects. A notable exception to this is provided by the asym. ferrocene dendrimers previously reported by Kaifer and co-workers, in which the branching facilitated oxidation, and it is proposed that in this case the dendritic effect is generated by a different mechanism. Interestingly, in methanol, the new sym. ferrocene dendrimer exhibited almost no dendritic effect, a result explained by the ability of methanol to interact extensively with the branched shell, generating a more open superstructure. By comparison of all the new data with other reports, this study provides a key insight into the structure-activity relationships which control redox processes in dendrimers and also an insight into the electrochem. process itself.

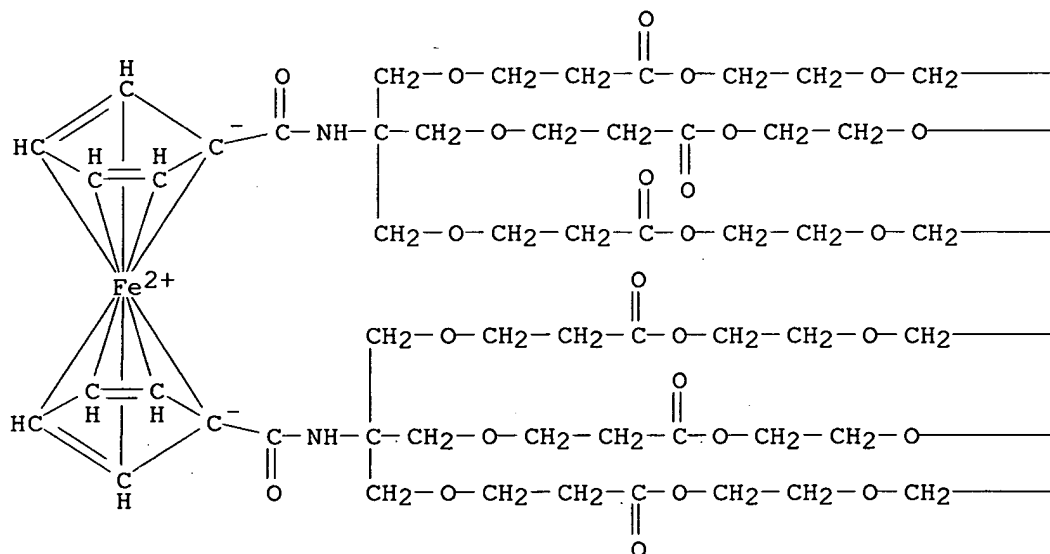
IT 403730-05-2P

RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)

(redox potential of ferrocene encapsulated within sym. dendrimers)

RN 403730-05-2 CAPLUS

CN Ferrocene, 1,1'-bis[1,8-dioxo-3,3-bis(5-oxo-2,6,9,12,15-pentaoxa-hexadec-1-yl)-5,9,12,15,18-pentaoxa-2-azanonadec-1-yl]- (9CI) (CA INDEX NAME)



— CH<sub>2</sub>—O—CH<sub>2</sub>—CH<sub>2</sub>—OMe

— CH<sub>2</sub>—CH<sub>2</sub>—O—CH<sub>2</sub>—CH<sub>2</sub>—OMe

— CH<sub>2</sub>—O—CH<sub>2</sub>—CH<sub>2</sub>—OMe

— CH<sub>2</sub>—O—CH<sub>2</sub>—CH<sub>2</sub>—OMe

— CH<sub>2</sub>—CH<sub>2</sub>—O—CH<sub>2</sub>—CH<sub>2</sub>—OMe

— CH<sub>2</sub>—O—CH<sub>2</sub>—CH<sub>2</sub>—OMe

RE.CNT 58      THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2000:887386 CAPLUS  
DN 134:260429  
TI Synthesis of dendritic iron(II) porphyrins with a tethered axial imidazole  
ligand designed as new model compounds for globins.  
AU Weyermann, Philipp; Diederich, Francois  
CS ETH-Zentrum, Laboratorium fur Organische Chemie, Zurich, CH-8092, Switz.  
SO Perkin 1 (2000), (24), 4231-4233  
CODEN: PERKF9; ISSN: 1470-4358  
PB Royal Society of Chemistry  
DT Journal  
LA English

OS CASREACT 134:260429

AB Novel dendritic iron(II) porphyrins with an axial imidazole ligand attached to the central porphyrin core were synthesized and fully characterized. The vacancy of the 2nd axial coordination site was demonstrated by their ability to coordinate the diat. gas mols. CO, O<sub>2</sub> and NO. The formation of NO complexes by dendritic iron(II) porphyrins was observed for the 1st time.

IT 247941-83-9 253604-43-2

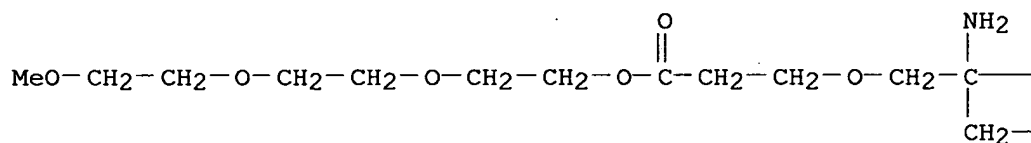
RL: RCT (Reactant); RACT (Reactant or reagent)

(reactant for preparation of dendritic iron(II) porphyrins with tethered axial imidazole as new models for globins)

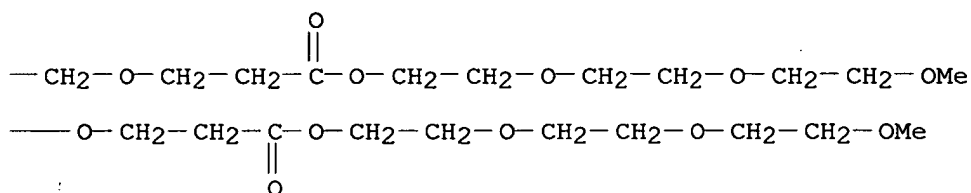
RN 247941-83-9 CAPLUS

CN 2,5,8,11,15,19-Hexaoxadocosan-22-oic acid, 17-amino-12-oxo-17-(5-oxo-2,6,9,12,15-pentaoxahexadec-1-yl)-, 2-[2-(2-methoxyethoxy)ethoxy]ethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



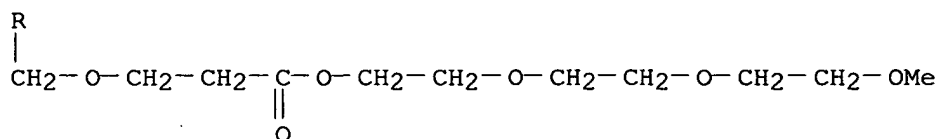
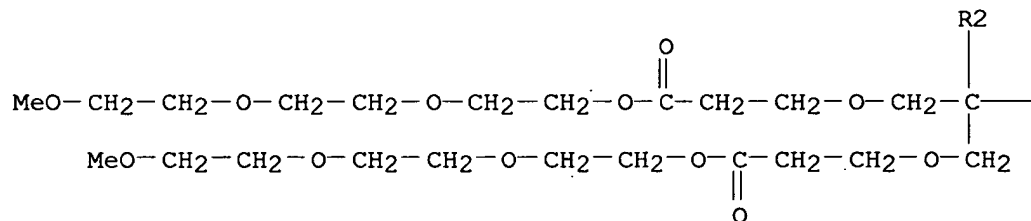
PAGE 1-B

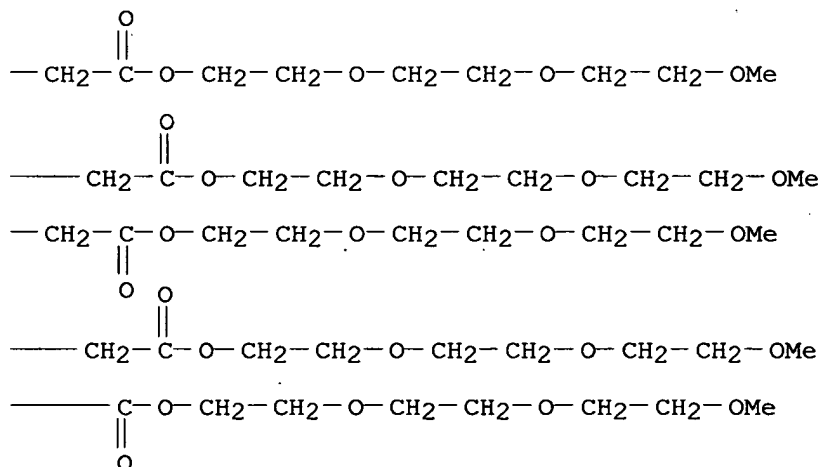
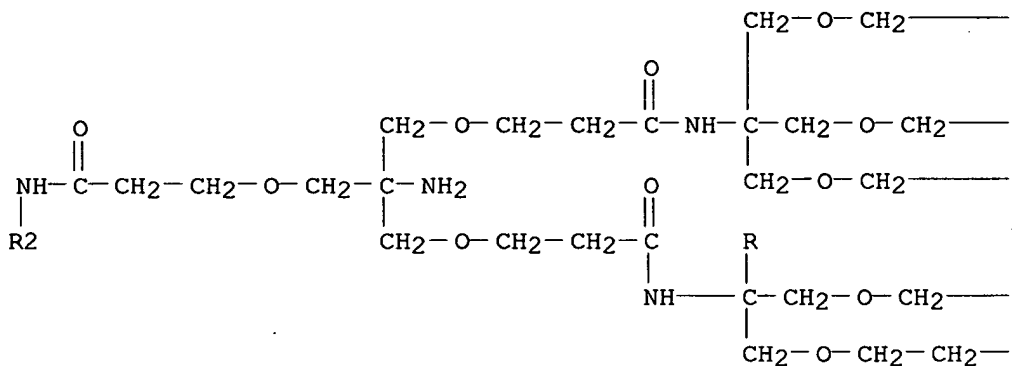
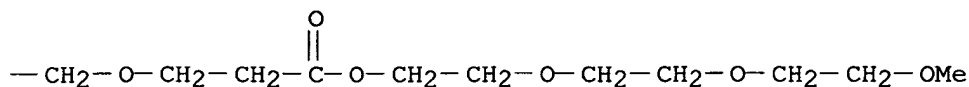


RN 253604-43-2 CAPLUS

CN 4,11,15,22-Tetraoxa-7,19-diazapentacosanedioic acid, 13-amino-13-[5,12-dioxo-7,7-bis(5-oxo-2,6,9,12,15-pentaoxahexadec-1-yl)-2,9,13,16,19,22-hexaoxa-6-azatricos-1-yl]-8,18-dioxo-6,6,20,20-tetrakis(5-oxo-2,6,9,12,15-pentaoxahexadec-1-yl)-, bis[2-[2-(2-methoxyethoxy)ethoxy]ethyl] ester (9CI) (CA INDEX NAME)

PAGE 1-A





RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:762944 CAPLUS

DN 132:87318

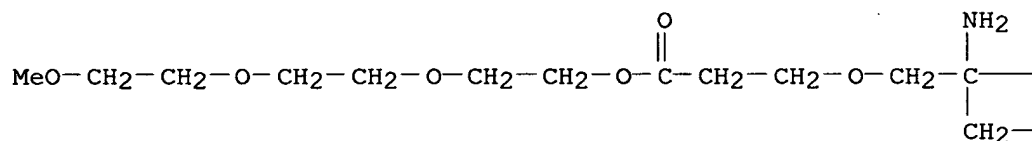
TI Dendritic iron porphyrins with tethered axial ligands: new model compounds for cytochromes

AU Weyermann, Philipp; Gisselbrecht, Jean-Paul; Boudon, Corinne; Diederich, Francois; Gross, Maurice

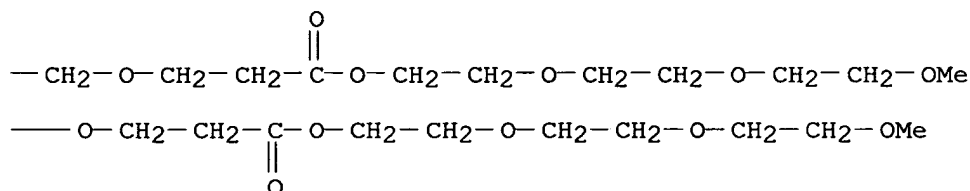
CS    Laboratorium für Organische Chemie, ETH-Zentrum, Zurich, CH-8092, Switz.

SO Angewandte Chemie, International Edition (1999), 38(21), 3215-3219  
 CODEN: ACIEF5; ISSN: 1433-7851  
 PB Wiley-VCH Verlag GmbH  
 DT Journal  
 LA English  
 AB Dendritic cytochrome mimics were prepared in which the central iron porphyrin possesses a stable axial ligation pattern. This allowed for a quant. evaluation of the effects of the dendritic shell on the redox properties of the iron porphyrin core. The porphyrin contains tethered imidazoles which coordinate to the axial positions of the iron center. The redox properties of the generation 0, 1 and 2 dendritic iron porphyrin complexes were studied using cyclic voltammetry (CV) and steady-state voltammetry (SSV). All three complexes undergo reversible 1e- redns. The presence of the dendritic shell greatly facilitates the reduction of the central iron porphyrin core with Fe(III)/Fe(II) redox potentials of -0.21, +0.08 and +0.10 V (vs. SCE) in CH2Cl2 for the generation 0, 1 and 2 complexes, resp. Redox potentials were also determined in MeCN and H2O.  
 IT **247941-83-9 253604-43-2**  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reactant for preparation of iron porphyrin dendritic complexes as cytochrome models)  
 RN 247941-83-9 CAPLUS  
 CN 2,5,8,11,15,19-Hexaoxadocosan-22-oic acid, 17-amino-12-oxo-17-(5-oxo-2,6,9,12,15-pentaoxahehexadec-1-yl)-, 2-[2-(2-methoxyethoxy)ethoxy]ethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

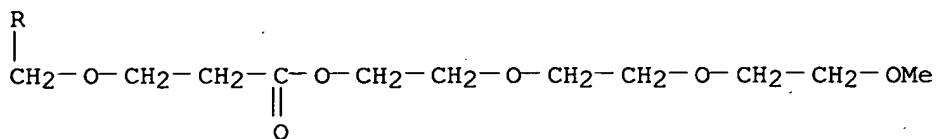
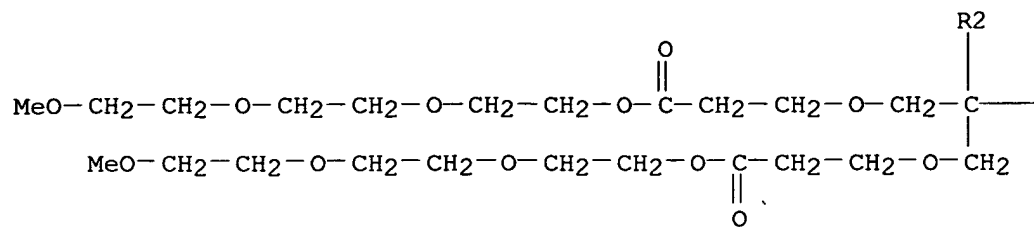


PAGE 1-B

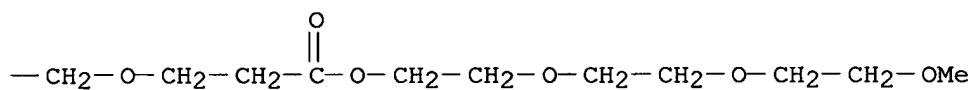


RN 253604-43-2 CAPLUS  
 CN 4,11,15,22-Tetraoxa-7,19-diazapentacosanedioic acid, 13-amino-13-[5,12-dioxo-7,7-bis(5-oxo-2,6,9,12,15-pentaoxahehexadec-1-yl)-2,9,13,16,19,22-hexaoxa-6-azatricos-1-yl]-8,18-dioxo-6,6,20,20-tetrakis(5-oxo-2,6,9,12,15-pentaoxahehexadec-1-yl)-, bis[2-[2-(2-methoxyethoxy)ethoxy]ethyl] ester (9CI) (CA INDEX NAME)

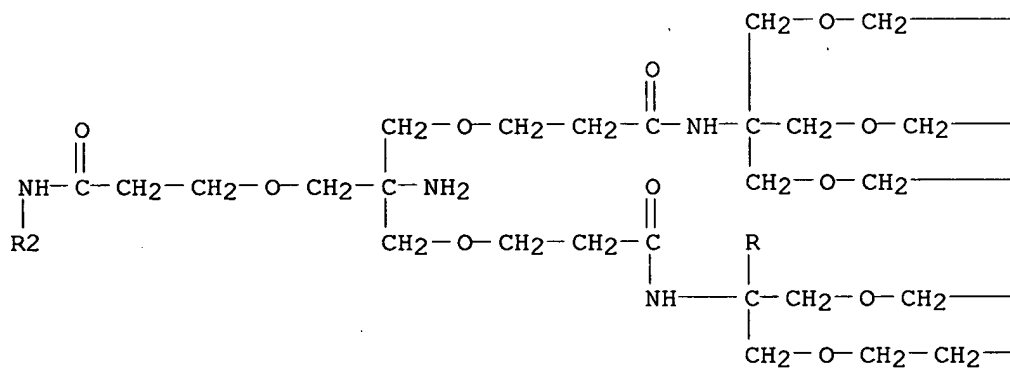
PAGE 1-A

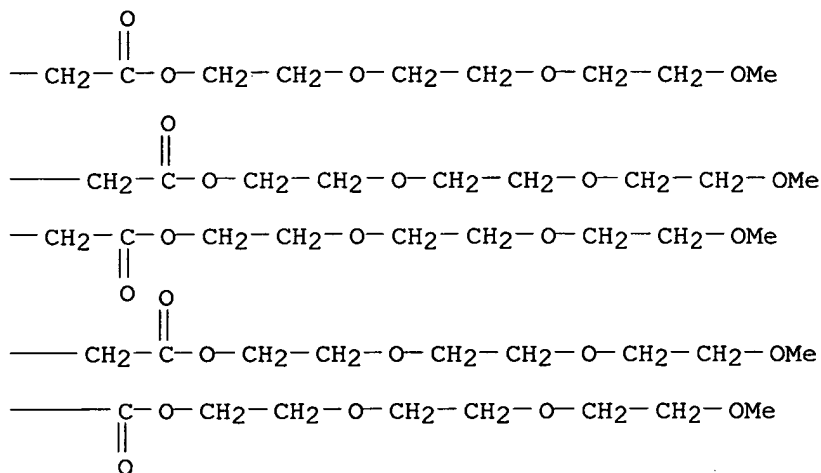


PAGE 1-B



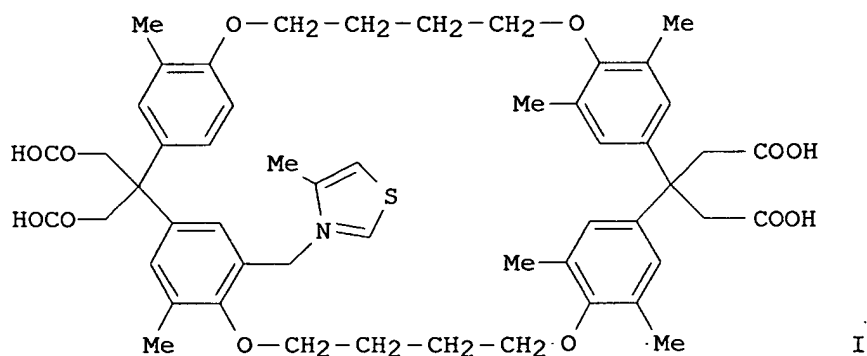
PAGE 2-A





RE.CNT 60 THERE ARE 60 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 1999:531949 CAPLUS  
DN 131:310630  
TI Catalytic dendrophanes as enzyme mimics. Synthesis, binding properties, micropolarity effect, and catalytic activity of dendritic thiazolio-cyclophanes  
AU Habicher, Tilo; Diederich, Francois; Gramlich, Volker  
CS Laboratorium Organische Chemie, ETH-Zentrum Zurich, Zurich, CH-8092, Switz.  
SO Helvetica Chimica Acta (1999), 82(7), 1066-1095  
CODEN: HCACAV; ISSN: 0018-019X  
PB Verlag Helvetica Chimica Acta  
DT Journal  
LA English  
OS CASREACT 131:310630  
GI



AB Catalytic dendrophanes were prepared as functional mimics of the thiamine-diphosphate-dependent enzyme pyruvate oxidase, and studied as catalysts in the oxidation of 2-naphthaldehyde to Me 2-naphthalenecarboxylate. They are composed of thiazolio-cyclophane initiator core I with 4 generation-2 (G-2) oligo(ether amide) dendrons  $\text{H}_2\text{NCH}_2\text{CONHCH}(\text{CH}_2\text{O}(\text{CH}_2)_2\text{CONHCH}_2[\text{O}(\text{CH}_2)_2\text{CO}_2\text{R}]_3)_3$  {R = Me,  $[(\text{CH}_2)_2\text{O}]_3\text{Me}$ }

attached. The 2 dendrophanes were synthesized by a convergent growth strategy by coupling the dendrons with the appropriate (chloromethyl)cyclophane and subsequent conversion with 4-methylthiazole. The x-ray crystal structures of cyclophane precursors on the way to dendrophanes were determined. Crystal-structure anal. of a benzene clathrate of one of the precursors revealed the formation of channel-like stacks by the cyclophane which incorporate its morpholinomethyl side-chain and the enclathrated benzene mol. The interactions of the enclathrated benzene mol. with the Ph rings of the 2 adjacent cyclophane mols. in the stack closely resemble those between neighboring benzene mols. in crystalline benzene. MALDI-TOF-mass spectrometry and <sup>1</sup>H- and <sup>13</sup>C NMR proved the monodispersity of the dendrophanes with mol. wts. ≤11500 Da.

<sup>1</sup>H-NMR and fluorescence binding titrns. in H<sub>2</sub>O and aqueous MeOH showed that the dendrophanes form stable 1:1 complexes with 2-naphthaldehyde and 6-(4-toluidino)naphthalene-2-sulfonate (TNS). The evaluation of the fluorescence-emission maxima of bound TNS revealed that the dendritic branching creates a microenvironment of distinctly reduced polarity at the cyclophane core by limiting its exposure to bulk solvent. Initial rate studies for the oxidation of 2-naphthalaldehyde to 2-naphthalenecarboxylate in basic aqueous MeOH in the presence of a flavin derivative revealed only a

weak

catalytic activity of the dendrophanes, despite the favorable micropolarity at the cyclophane active site. The low catalytic activity in the interior of the macromols. was explained by steric hindrance of reaction transition states by the dendritic branches.

IT 247941-82-8P 247941-83-9P 247941-86-2P

247941-87-3P

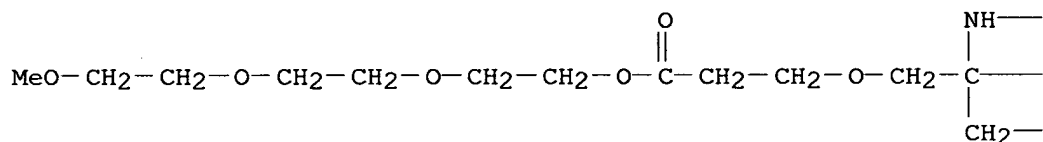
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation, binding properties, micropolarity, and catalytic activity of dendritic thiazolio-cyclophanes as enzyme mimics)

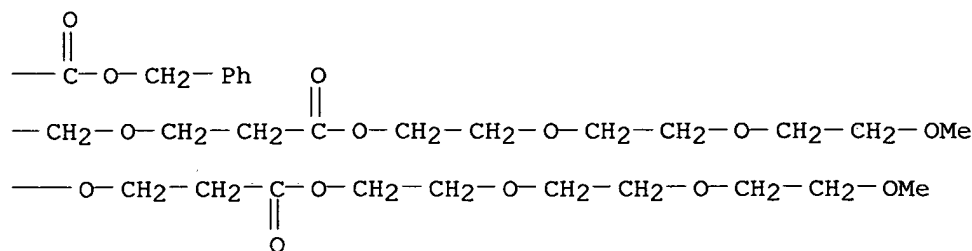
RN 247941-82-8 CAPLUS

CN 2,5,8,11,15,19-Hexaoxadocosan-22-oic acid, 12-oxo-17-(5-oxo-2,6,9,12,15-pentaoxahexadec-1-yl)-17-[[ (phenylmethoxy) carbonyl] amino]-, 2-[2-(2-methoxyethoxy)ethoxy]ethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

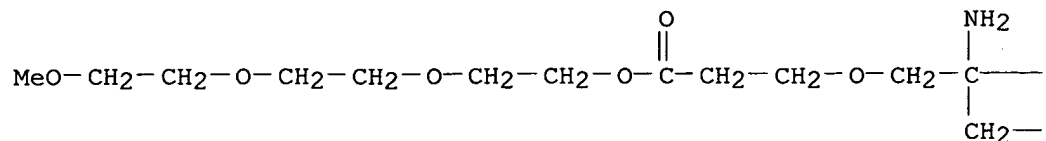


RN 247941-83-9 CAPLUS

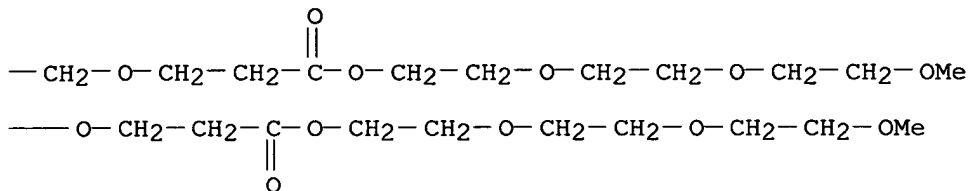
CN 2,5,8,11,15,19-Hexaoxadocosan-22-oic acid, 17-amino-12-oxo-17-(5-oxo-

2,6,9,12,15-pentaoxahexadec-1-yl)-, 2-[2-(2-methoxyethoxy)ethoxy]ethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



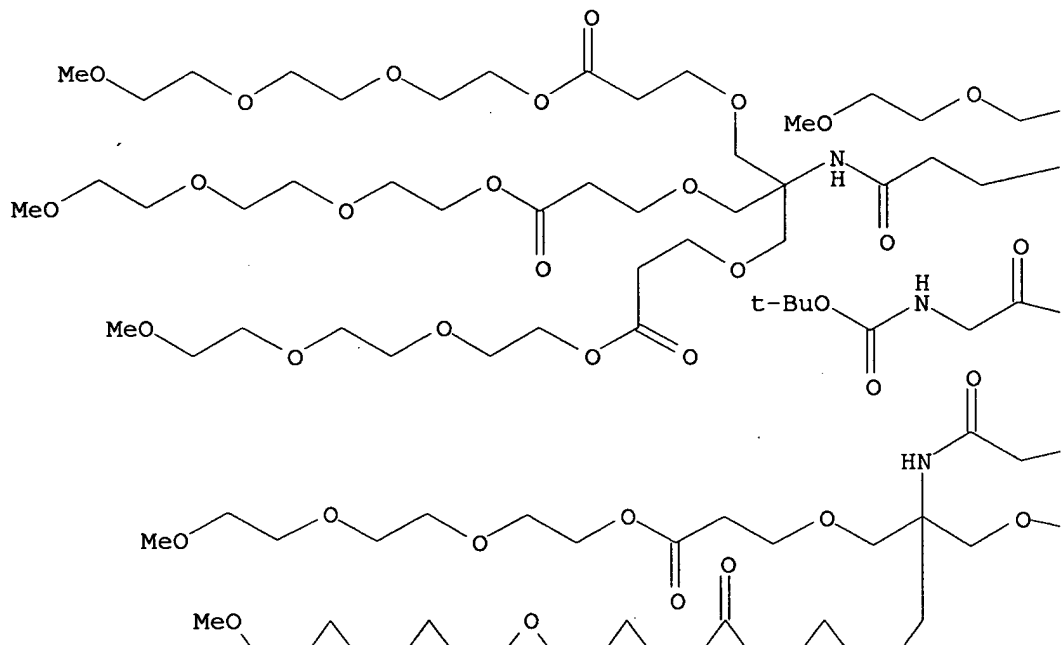
PAGE 1-B

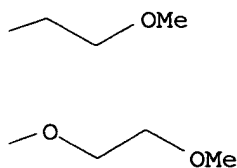
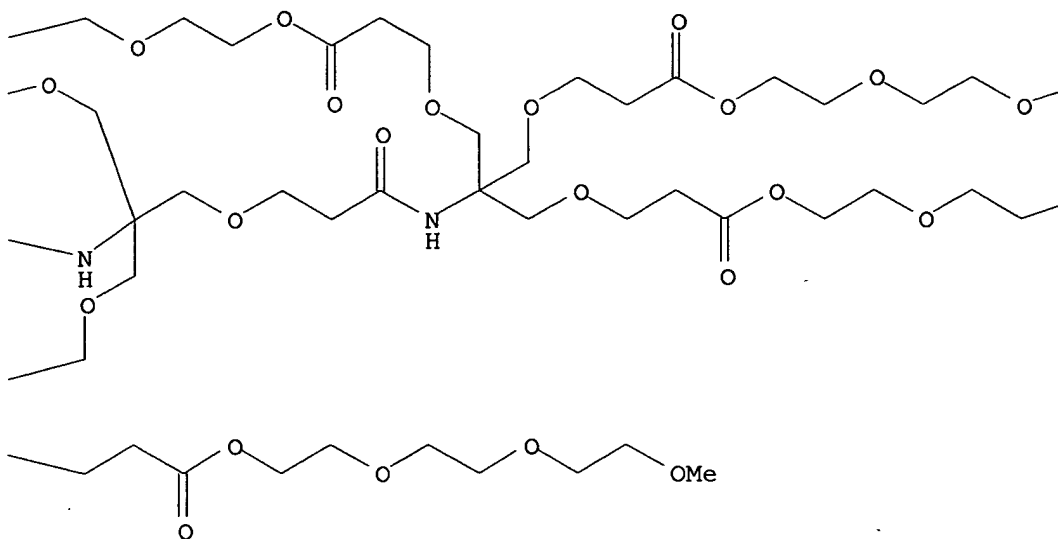


RN 247941-86-2 CAPLUS

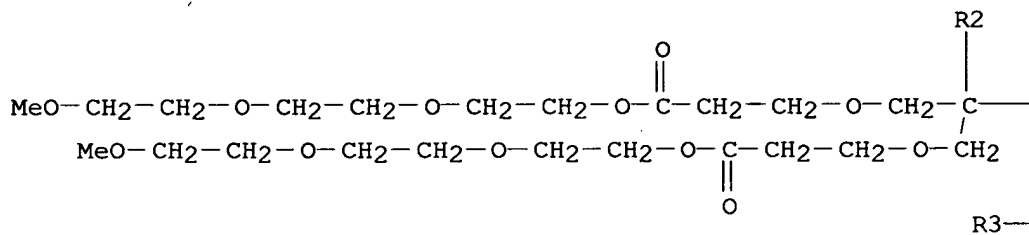
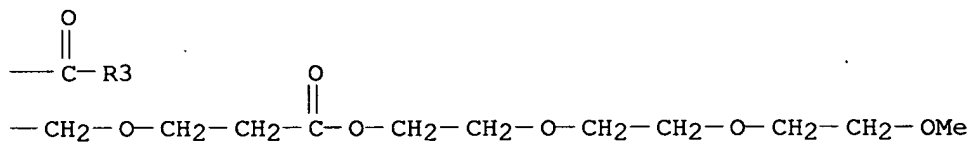
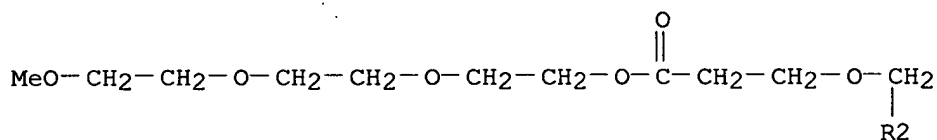
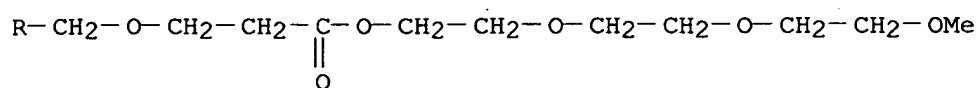
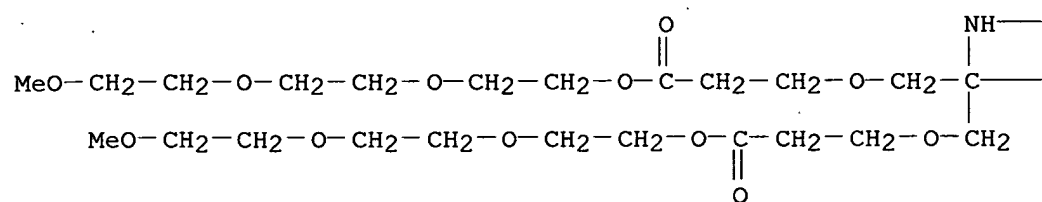
CN 4,11,15,22-Tetraoxa-7,19-diazapentacosanedioic acid, 13-[[[(1,1-dimethylethoxy)carbonyl]amino]acetyl]amino]-13-[5,12-dioxo-7,7-bis(5-oxo-2,6,9,12,15-pentaoxahexadec-1-yl)-2,9,13,16,19,22-hexaoxa-6-azatricos-1-yl]-8,18-dioxo-6,6,20,20-tetrakis(5-oxo-2,6,9,12,15-pentaoxahexadec-1-yl)-, bis[2-[2-(2-methoxyethoxy)ethoxy]ethyl] ester (9CI) (CA INDEX NAME)

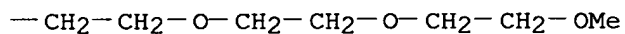
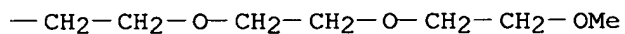
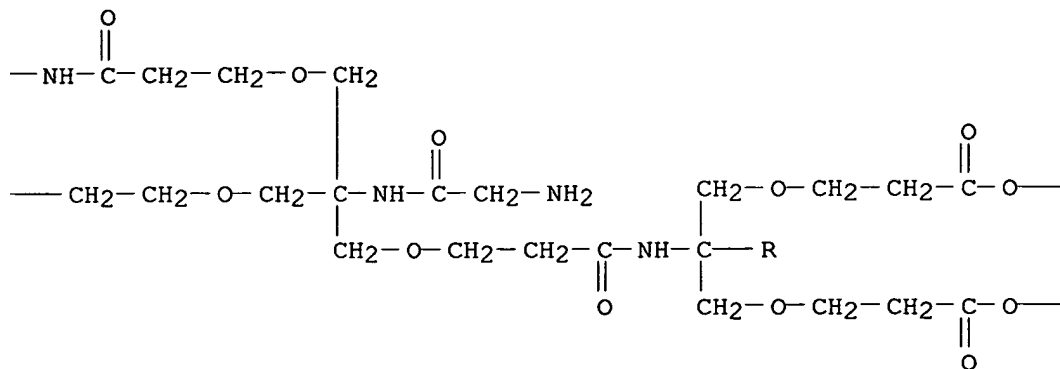
PAGE 1-A





RN 247941-87-3 CAPLUS  
 CN 4,11,15,22-Tetraoxa-7,19-diazapentacosanedioic acid, 13-  
 [(aminoacetyl)amino]-13-[5,12-dioxo-7,7-bis(5-oxo-2,6,9,12,15-  
 pentaohexadec-1-yl)-2,9,13,16,19,22-hexaoxa-6-azatricos-1-yl]-8,18-dioxo-  
 6,6,20,20-tetrakis(5-oxo-2,6,9,12,15-pentaohexadec-1-yl)-,  
 bis[2-[2-(2-methoxyethoxy)ethoxy]ethyl] ester (9CI) (CA INDEX NAME)





RE.CNT 72 THERE ARE 72 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 1997:131921 CAPLUS  
DN 126:144502  
TI Preparation of polyhydric alcohol glyceryl ethers  
IN Kita, Katsumi; Kama, Hiroshi  
PA Kao Corp, Japan  
SO Jpn. Kokai Tokkyo Koho, 8 pp.  
CODEN: JKXXAF

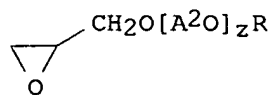
DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 08325186	A2	19961210	JP 1995-133088	19950531
				JP 1995-133088	19950531

GI



II

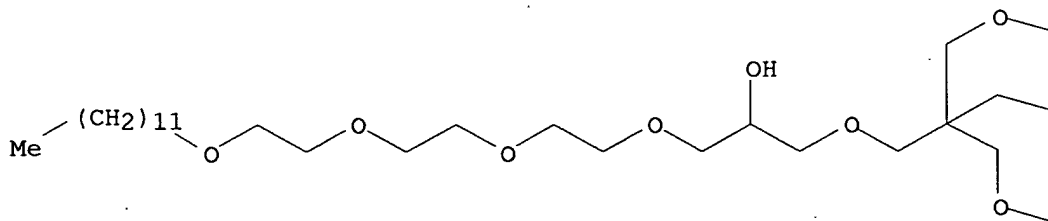
AB G[[A1O]xB]y [I; A1 = C2-4 alkylene; B = H, CH<sub>2</sub>CH(OH)CH<sub>2</sub>O[A2O]zR, CH(CH<sub>2</sub>OH)CH<sub>2</sub>O[A2O]zR; all B ≠ H; R = C8-36 alkyl, alkenyl; A2 = C2-4 alkylene; G = ≥3 OH-containing alc. residue; x = 0-10; y = number of O of G; z = 0.1-30], useful as cosmetic bases, emulsifiers, solubilizers, lubricants, liquid crystal-forming agents, etc., are prepared by reaction of G[[A1O]xH]y (A1, G, x, y = same as I) with glycidyl ethers II (R, A2, z = same as I) in the presence of basic catalysts. Pentaerythritol was treated with II (R = dodecyl, A2 = C<sub>2</sub>H<sub>4</sub>, z = 3) in DMSO in the presence of NaOH at 105° for 4 h to give 25% I [G = pentaerythritol residue, 1 of B = CH<sub>2</sub>CH(OH)CH<sub>2</sub>O[C<sub>2</sub>H<sub>4</sub>O]3C<sub>12</sub>H<sub>25</sub>, other B = H, x = 0, y = 4]. A hair rinse containing I gave flexibility, smoothness, and no oiliness to the hair.

IT **186446-14-0P**  
 RL: BUU (Biological use, unclassified); IMF (Industrial manufacture); SPN (Synthetic preparation); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of polyhydric alc. glyceryl ethers)

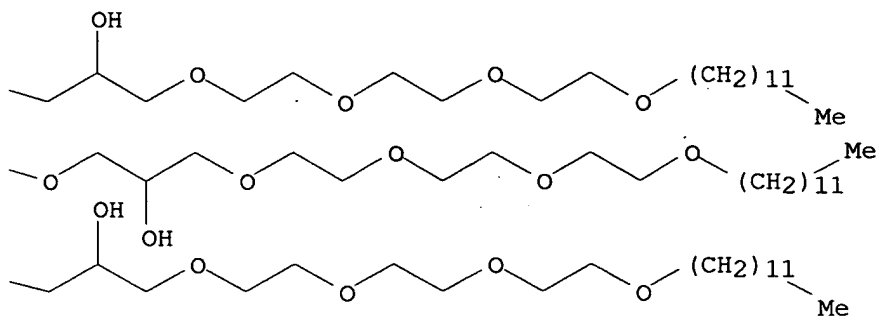
RN 186446-14-0 CAPLUS

CN 13,16,19,22,26,30,34,37,40,43-Decaoxapentacontane-24,32-diol, 28,28-bis(4-hydroxy-2,6,9,12,15-pentaoxaheptacos-1-yl)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



=> FIL STNGUIDE

COST IN U.S. DOLLARS

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

CA SUBSCRIBER PRICE

SINCE FILE

ENTRY

60.19

SINCE FILE

ENTRY

-8.03

TOTAL

SESSION

547.40

TOTAL

SESSION

-8.03

FILE 'STNGUIDE' ENTERED AT 13:56:25 ON 20 JAN 2005  
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT  
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE  
AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.  
LAST RELOADED: Jan 14, 2005 (20050114/UP).

=>

=> logoff hold

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
2.04	549.44

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
0.00	-8.03

CA SUBSCRIBER PRICE

SESSION WILL BE HELD FOR 60 MINUTES  
STN INTERNATIONAL SESSION SUSPENDED AT 14:16:55 ON 20 JAN 2005

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1639MLS

PASSWORD:

\* \* \* \* \* RECONNECTED TO STN INTERNATIONAL \* \* \* \* \*  
SESSION RESUMED IN FILE 'STNGUIDE' AT 14:39:21 ON 20 JAN 2005  
FILE 'STNGUIDE' ENTERED AT 14:39:21 ON 20 JAN 2005  
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE  
AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	2.04	549.44

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-8.03

=> fil reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	2.04	549.44

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-8.03

FILE 'REGISTRY' ENTERED AT 14:39:33 ON 20 JAN 2005  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file  
provided by InfoChem.

STRUCTURE FILE UPDATES: 19 JAN 2005 HIGHEST RN 817158-90-0  
DICTIONARY FILE UPDATES: 19 JAN 2005 HIGHEST RN 817158-90-0

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more  
information enter HELP PROP at an arrow prompt in the file or refer  
to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.86	550.30

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-8.03

FILE 'REGISTRY' ENTERED AT 14:40:35 ON 20 JAN 2005  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 19 JAN 2005 HIGHEST RN 817158-90-0  
DICTIONARY FILE UPDATES: 19 JAN 2005 HIGHEST RN 817158-90-0

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>

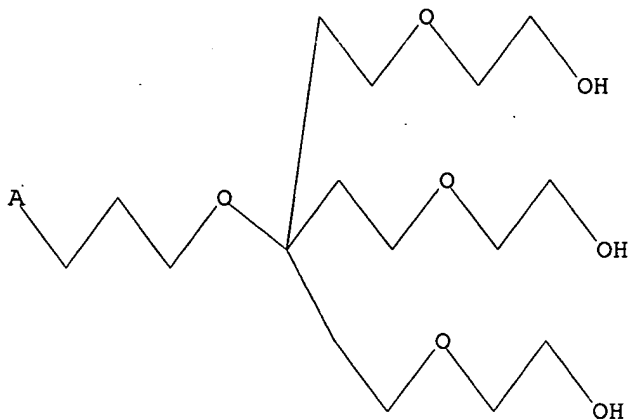
Uploading C:\Program Files\Stnexp\Queries\10161279\10049259\OCCCO.str

L14 STRUCTURE UPLOADED

=> d

L14 HAS NO ANSWERS

L14 STR



Structure attributes must be viewed using STN Express query preparation.

=> l14

SAMPLE SEARCH INITIATED 14:41:16 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 215 TO ITERATE

100.0% PROCESSED 215 ITERATIONS  
SEARCH TIME: 00.00.01

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 3421 TO 5179  
PROJECTED ANSWERS: 0 TO 0

L15 0 SEA SSS SAM L14

=> 114 full

FULL SEARCH INITIATED 14:42:07 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 4565 TO ITERATE

100.0% PROCESSED 4565 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

L16 0 SEA SSS FUL L14

=>

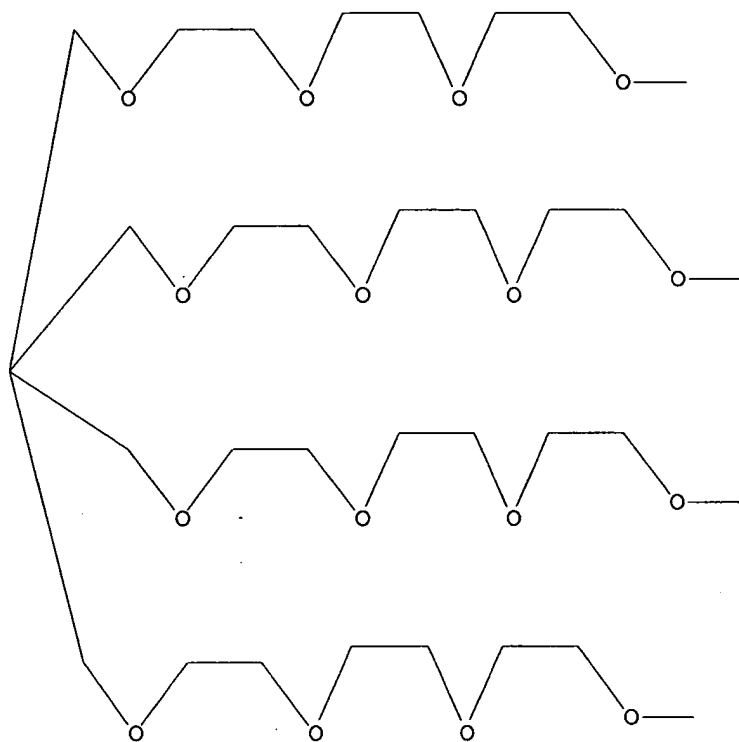
Uploading C:\Program Files\Stnexp\Queries\10161279\10049259\tetra core.str

L17 STRUCTURE UPLOADED

=> d

L17 HAS NO ANSWERS

L17 STR



Structure attributes must be viewed using STN Express query preparation.

=> 117

SAMPLE SEARCH INITIATED 14:43:07 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 138 TO ITERATE

100.0% PROCESSED 138 ITERATIONS  
SEARCH TIME: 00.00.01

1 ANSWERS

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 2056 TO 3464  
PROJECTED ANSWERS: 1 TO 80

L18 1 SEA SSS SAM L17

=> l18 full

FULL SEARCH INITIATED 14:43:18 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 2386 TO ITERATE

100.0% PROCESSED 2386 ITERATIONS  
SEARCH TIME: 00.00.01

39 ANSWERS

L19 39 SEA SSS FUL L17

=> fil caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	324.38	874.68
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-8.03

FILE 'CAPLUS' ENTERED AT 14:44:05 ON 20 JAN 2005  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 20 Jan 2005 VOL 142 ISS 4  
FILE LAST UPDATED: 19 Jan 2005 (20050119/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> l19

L20 17 L19

=> d fbib abs hitstr l20 1-17

L20 ANSWER 1 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2002:888888 CAPLUS  
DN 137:381945

TI Immobilized palladium(II) compounds for separating aromatic amine bases, nucleosides, nucleotides, and nucleotide sequences  
IN Bruening, Ronald L.; Krakowiak, Krzysztof E.; Bruening, Milton; Haymore,

Barry L.; Dearden, David Vernell  
 PA IBC Advanced Technologies, Inc., USA  
 SO PCT Int. Appl., 113 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002092766	A2	20021121	WO 2002-US14952	20020511
	WO 2002092766	A3	20040624		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
				US 2001-290577P	P 20010511
				US 2002-144245	A 20020510
	US 2003050458	A1	20030313	US 2002-144245	20020510
	US 6774082	B2	20040810		
				US 2001-290577P	P 20010511
	EP 1453602	A2	20040908	EP 2002-736754	20020511
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR			
				US 2001-290577P	P 20010511
				US 2002-144245	A 20020510
				WO 2002-US14952	W 20020511
	JP 2005501000	T2	20050113	JP 2002-589634	20020511
				US 2001-290577P	P 20010511
				US 2002-144245	A 20020510
				WO 2002-US14952	W 20020511

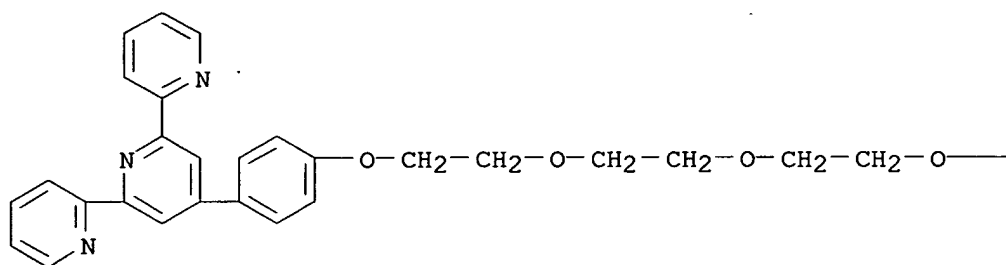
AB The compns. of the present invention comprise one or more palladium bound ligands that are covalently bonded to inorg. (e.g., silica gel) or organic (e.g., agarose, polystyrene) solid supports. These palladium bound ligands bonded to solid supports can be used for single heterocyclic amine base separation, or can be used to sep. nucleotide chain containing specific sequences from other nucleotides or nucleotide chains. In one aspect of the invention, each ligand present is individually complexed to a single Pd(II) ion. If there are from 2 to 4 ligands present in the composition, then each ligand present must be separated from the other ligands by at least 3 atoms, preferably from 3 to 20 carbon atoms or equivalent spacing. Thus, 1,5,9-18,21,26-hexathia-12,15-dioxahexacosane was synthesized and immobilized on silica gel. After loading with Pd(II) this material was used to sep. GG from AA, CC, and TT with selectivities of 7, 9, and 2.3, resp.

IT 475976-90-ODP, reaction products with silica gel  
 RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (immobilized palladium(II) compds. for separating aromatic amine bases, nucleosides, nucleotides, and nucleotide sequences)

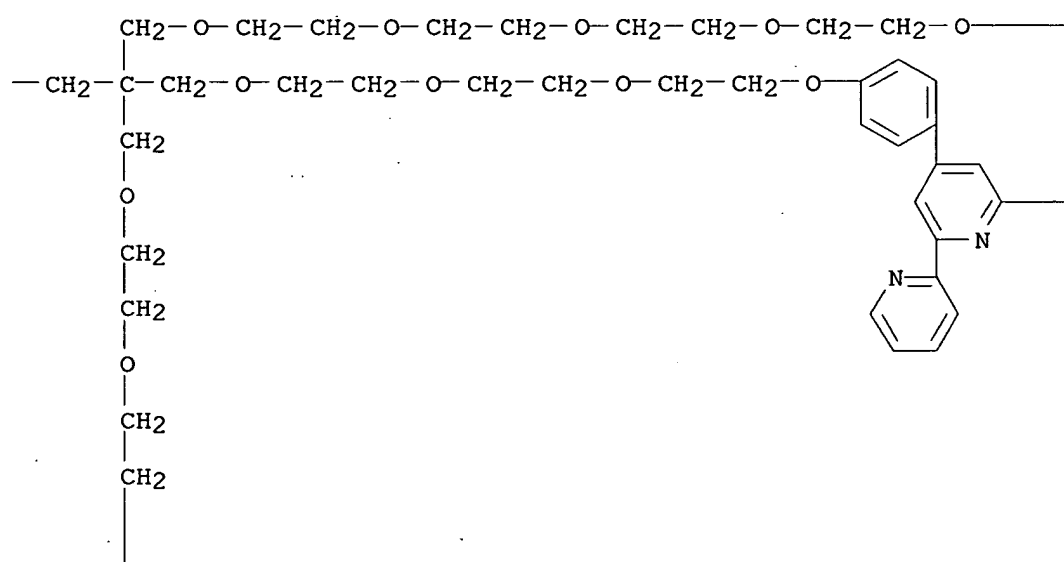
RN 475976-90-0 CAPLUS

CN 2,7,11,14,17,20,23,27,30,33-Decaoxa-3-silapentatriacontan-9-ol,  
 3,3-dimethoxy-35-(4-[2,2':6',2''-terpyridin]-4'-ylphenoxy)-25,25-bis[[2-[2-[2-(4-[2,2':6',2''-terpyridin]-4'-ylphenoxy)ethoxy]ethoxy]ethoxy]methyl]-  
 (9CI) (CA INDEX NAME)

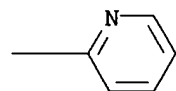
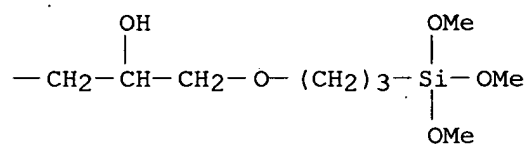
PAGE 1-A

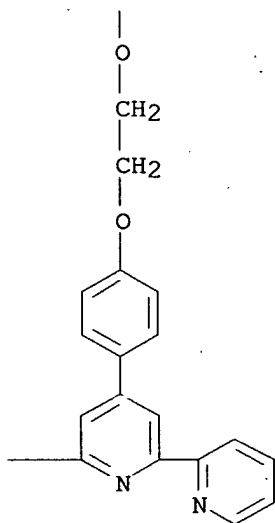
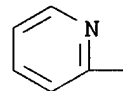


PAGE 1-B



PAGE 1-C





IT **475976-89-7P**

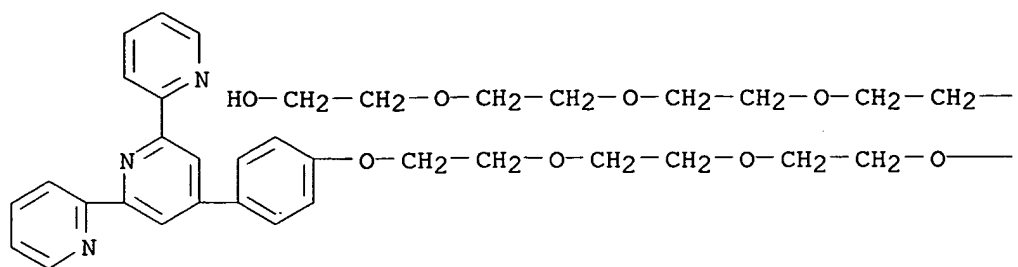
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(immobilized palladium(II) compds. for separating aromatic amine bases, nucleosides, nucleotides, and nucleotide sequences)

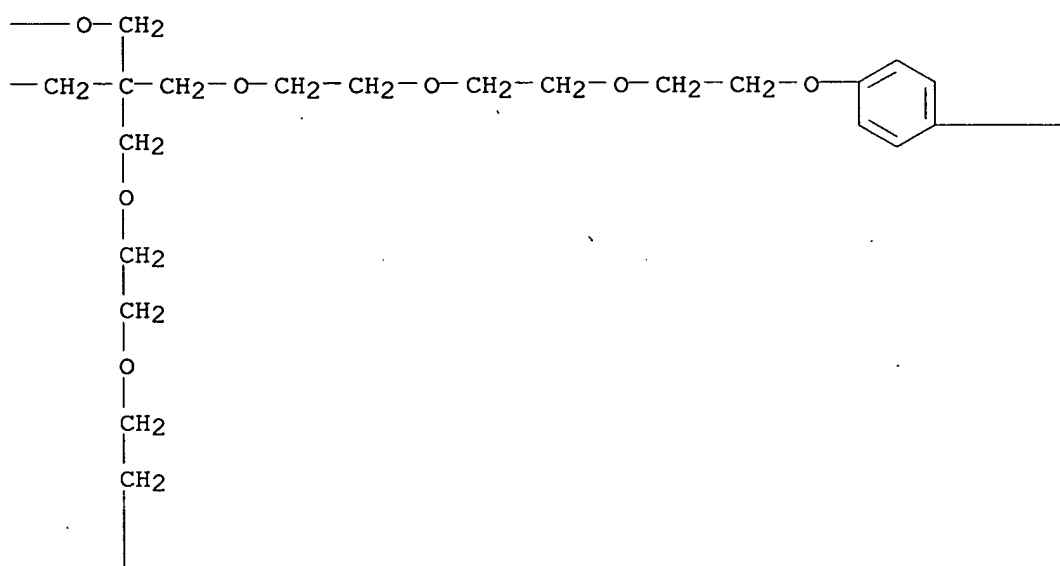
RN 475976-89-7 CAPLUS

CN 3,6,9,12,16,19,22-Hepta-oxatetracosan-1-ol; 24-(4-[2,2':6',2''-terpyridin]-4'-ylphenoxy)-14,14-bis[[2-[2-[2-(4-[2,2':6',2''-terpyridin]-4'-ylphenoxy)ethoxy]ethoxy]ethoxy]methyl]- (9CI) (CA INDEX NAME)

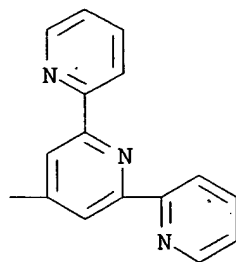
PAGE 1-A

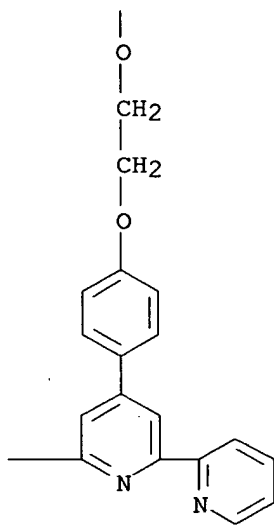
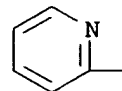


PAGE 1-B



PAGE 1-C





L20 ANSWER 2 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN  
 AN 2002:849710 CAPLUS  
 DN 137:338424  
 TI Process for producing fluorinated polyoxyalkylene compounds  
 IN Shirakawa, Daisuke; Okazoe, Takashi; Sugiyama, Norihide; Enna, Genichirou;  
 Tatematsu, Shin  
 PA Asahi Glass Company, Limited, Japan  
 SO PCT Int. Appl., 29 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002088218	A1	20021107	WO 2002-JP4264	20020426
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS,				

LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL,  
 PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA,  
 UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,  
 CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,  
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

JP 2001-131883 A 20010427

AB A process for producing fluorinated polyoxyalkylene compds. of various structures at low cost comprises reacting a polyoxyalkylene compound having  $\geq 1$  OH group with a compound having a  $C \geq 2$  fluorinated organic group and a group which reacts with OH group to form an ester linkage to prepare a polyoxyalkylene compound having fluorinated organic group bonded through an ester linkage and subsequently conducting liquid-phase fluorination to thereby replace with fluorine  $\geq 1$  H atoms present in the polyoxyalkylene compound having the fluorinated organic group bonded through an ester linkage.

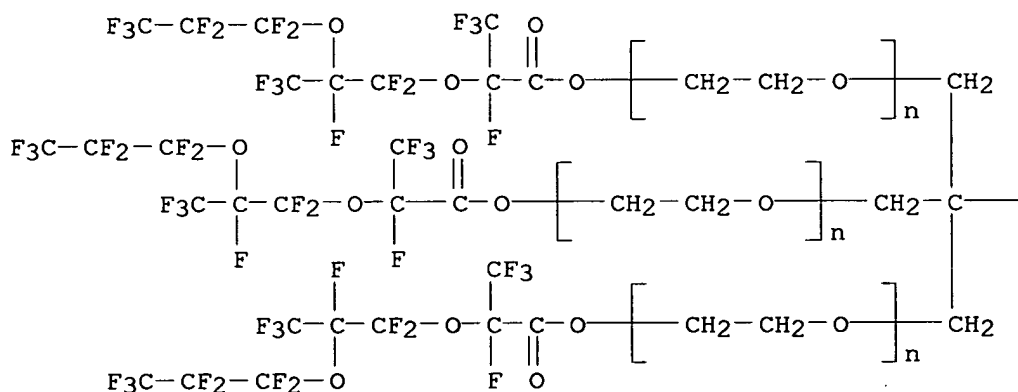
IT 474090-06-7DP, fluorinated

RL: IMF (Industrial manufacture); PREP (Preparation)  
 (low-cost process for production of fluorinated polyoxyalkylenes)

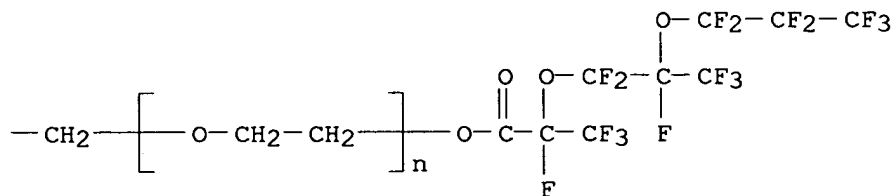
RN 474090-06-7 CAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -hydro- $\omega$ -[2,3,3,3-tetrafluoro-2-[1,1,2,3,3,3-hexafluoro-2-(heptafluoropropoxy)propoxy]-1-oxopropoxy]-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1) (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 3 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:331834 CAPLUS

DN 136:342254

TI (Poly)oxyalkylene block silyl ester copolymers and antifouling paint compositions for hull or underwater structure containing them

IN Arimura, Hidetaka; Hiyoshi, Satoshi; Nakamura, Naoya; Tsuboi, Makoto

PA Chugoku Marine Paints, Ltd., Japan

SO Eur. Pat. Appl., 77 pp.

CODEN: EPXXDW

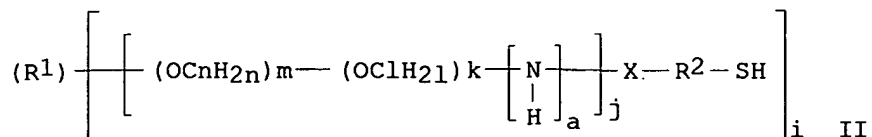
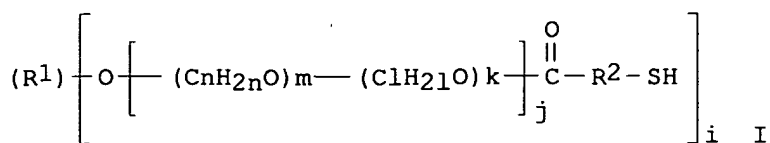
DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1201700	A1	20020502	EP 2001-308986	20011023
	EP 1201700	B1	20030514		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
				JP 2000-325525	A 20001025
				JP 2000-325526	A 20001025
	JP 2002201280	A2	20020719	JP 2001-303560	20010928
				JP 2000-325525	A 20001025
	JP 2002206069	A2	20020726	JP 2001-303561	20010928
				JP 2000-325526	A 20001025
	SG 97209	A1	20030718	SG 2001-6527	20011022
				JP 2000-325525	A 20001025
				JP 2000-325526	A 20001025
	US 2002156224	A1	20021024	US 2001-983181	20011023
	US 6828030	B2	20041207		
				JP 2000-325525	A 20001025
				JP 2000-325526	A 20001025
	AT 240362	E	20030515	AT 2001-308986	20011023
				JP 2000-325525	A 20001025
				JP 2000-325526	A 20001025
	PT 1201700	T	20030930	PT 2001-308986	20011023
				JP 2000-325525	A 20001025
				JP 2000-325526	A 20001025
	ES 2201017	T3	20040316	ES 2001-1308986	20011023
				JP 2000-325525	A 20001025
				JP 2000-325526	A 20001025
	NO 2001005198	A	20020426	NO 2001-5198	20011024
				JP 2000-325525	A 20001025
				JP 2000-325526	A 20001025
	CN 1361219	A	20020731	CN 2001-135836	20011025
				JP 2000-325525	A 20001025
				JP 2000-325526	A 20001025
	HK 1043693	A1	20040319	HK 2002-103998	20020529
				JP 2000-325525	A 20001025
				JP 2000-325526	A 20001025

GI



AB The copolymers comprise silyl ester copolymer block units (A) and block units (B), where the A comprises (a) component units derived from a polymerizable unsatd. carboxylic acid silyl ester, and (b) polymerizable unsatd. monomer units other than the component units (a), the B is derived from a mercapto compound I or II [R<sup>1</sup> = initiator group, ether bond-containing initiator group; R<sup>2</sup> = hydrocarbylene group, ether bond-containing branched hydrocarbylene group; X = C(S)O, NHC(S)O; n = 1-5; m = 1-100; i = 1-5 as the valency of R<sup>1</sup>; k = 0, 1-100; a = 0, 1; j = 1-50]. The present invention enables forming an antifouling coating film which exhibits less cracking tendency, excellent adherence so as to ensure less peeling tendency and desirably controlled hydrolysis rate so as to be excellent in antifouling properties. Thus, 100 parts of xylene was charged in a reaction vessel equipped with an stirrer, a condenser, a thermometer, a dropping device, a N introduction tube and a heating/cooling jacket, and heated under stirring at 85° while blowing nitrogen thereinto. A mixture of triisopropylsilyl acrylate 40, Me methacrylate 55, HSC<sub>2</sub>H<sub>4</sub>C(O)O(C<sub>2</sub>H<sub>4</sub>O)<sub>4</sub>C(O)C<sub>2</sub>H<sub>4</sub>SH 1.5 and AIBN 1 part was dropped into the reaction vessel while maintaining the above temperature over a period of 2 h. The stirring was continued at the same temperature for 4 h. Further, 0.4 parts AIBN was added, and the agitation was continued at the same temperature for 4

h.

A colorless transparent solution of (poly)oxyalkylene block silyl ester copolymer was obtained. An antifouling paint was obtained from the copolymer 26, cuprous oxide 43, Cu pyrithione 3, ZnO 6, anhydrous gypsum 1, red iron oxide 0.2, titanium white 1.8, Disparlon 4200-20 1.5, Disparlon A603-20X 4 and xylene 13.5 parts.

IT 418763-85-6

RL: MOA (Modifier or additive use); USES (Uses)

(coupler for silyl ester-containing (meth)acrylate copolymers;

(poly)oxyalkylene block silyl ester copolymers and antifouling paint compns. for hull or underwater structure containing them)

RN 418763-85-6 CAPLUS

CN Acetic acid, mercapto-, 14,14-bis(16-mercapto-15-oxo-2,5,8,11,14-pentaoxahehexadec-1-yl)-3,6,9,12,16,19,22,25-octaoxaheptacosane-1,27-diyl ester (9CI) (CA INDEX NAME)

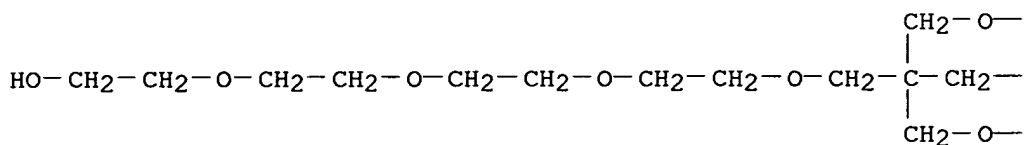
L20 ANSWER 4 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2001:465935 CAPLUS  
DN 135:196047  
TI Polyethyleneoxide-capped phthalocyanines: limiting phthalocyanine  
aggregation to dimer formation  
AU Dominguez, D. D.; Snow, A. W.; Shirk, J. S.; Pong, R. G. S.  
CS Chemistry Division, Naval Research Laboratory, Washington, DC, 20375, USA  
SO Journal of Porphyrins and Phthalocyanines (2001), 5(7), 582-592  
CODEN: JPPHFZ; ISSN: 1088-4246  
PB John Wiley & Sons Ltd.  
DT Journal  
LA English  
AB The synthesis and characterization of a soluble metal-free  
polyethyleneoxide-capped phthalocyanine and the corresponding lead compound  
are described. This phthalocyanine was designed to allow the formation of  
dimers but to inhibit formation of higher aggregates. The monomer/dimer  
equilibrium constant in chloroform solns. is  $750 \pm 20 \text{ l mol}^{-1}$ . No evidence  
for higher aggregates was found. The mol. extinction coefficient of the  
metal-free polyethyleneoxide-capped phthalocyanine in chloroform is one of  
the lowest known ( $2.5 + 104 \text{ l mol}^{-1} \text{ cm}^{-1}$ ). The lead-substituted  
material was demonstrated to be a reverse saturable absorber from 532 nm  
to about 610 nm. It possesses a large nonlinear absorption coefficient in the  
visible and is a promising optical limiter material.

RL: RCT (Reactant); RACT (Reactant or reagent)  
(in preparation of polyethyleneoxide-capped phthalocyanines)

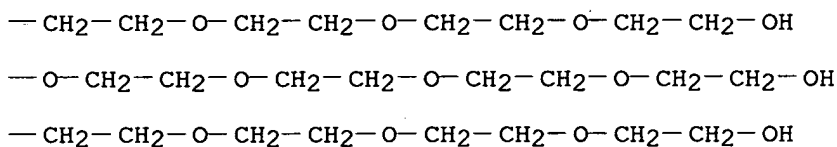
RN 172355-08-7 CAPLUS

3,6,9,12,16,19,22,25-Octaoxaheptacosane-1,27-diol, 14,14-bis(13-hydroxy-2,5,8,11-tetraoxatridec-1-yl)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



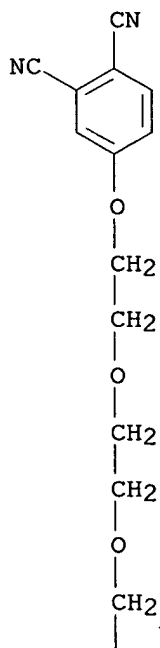
IT 356564-95-9P

RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(polyethyleneoxide-capped phthalocyanines: limiting phthalocyanine aggregation to dimer formation)

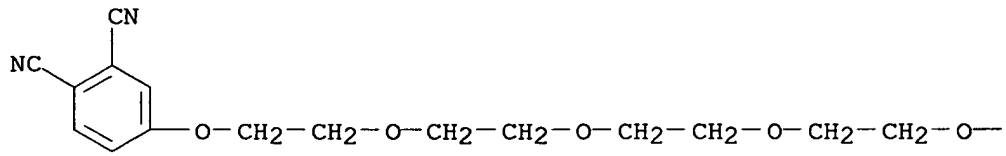
RN 356564-95-9 CAPLUS

1,2-Benzenedicarbonitrile, 4,4'-[[14,14-bis[13-(3,4-dicyanophenoxy)-2,5,8,11-tetraoxatridec-1-yl]-3,6,9,12,16,19,22,25-octaoxaheptacosane-1,27-diyl]bis(oxy)]bis- (9CI) (CA INDEX NAME)

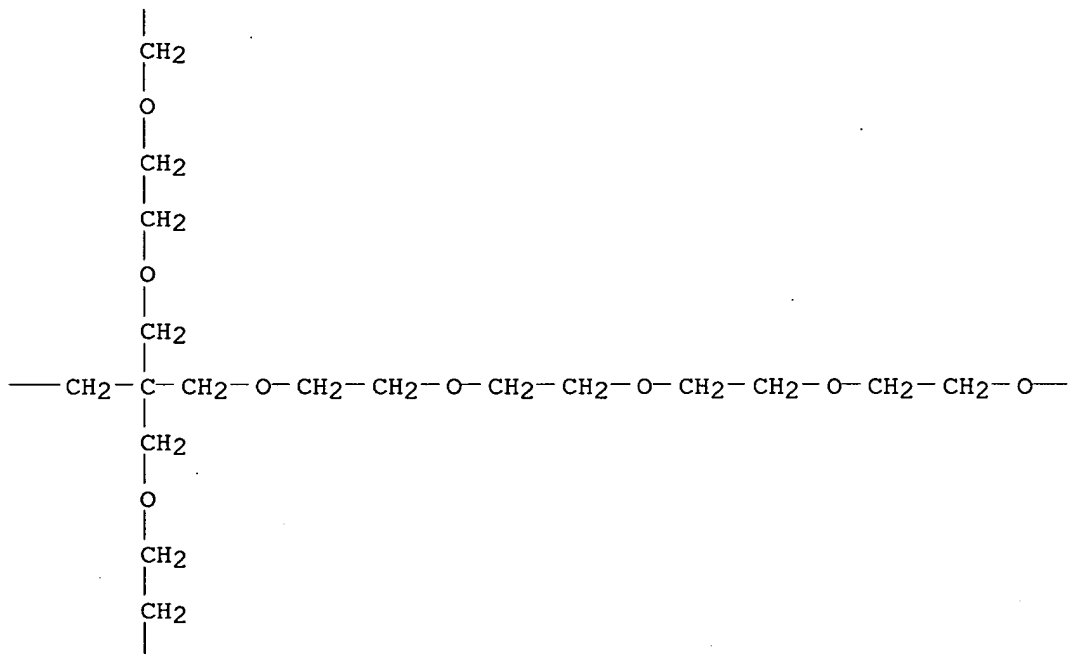
PAGE 1-B

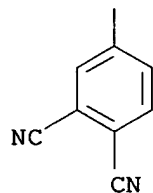
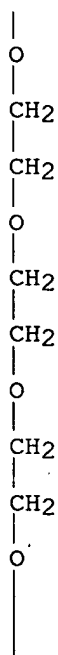
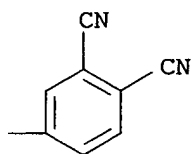


PAGE 2-A



PAGE 2-B





RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 5 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2001:319601 CAPLUS

DN 134:334315  
 TI Lithographic printing plate precursor  
 IN Higashi, Tatsuji; Fujimaki, Kazuhiro  
 PA Fuji Photo Film Co., Ltd., Japan  
 SO Eur. Pat. Appl., 99 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1096314	A1	20010502	EP 2000-123343	20001027
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2001125265	A2	20010511	JP 1999-305734	A 19991027
	US 6475700	B1	20021105	JP 1999-305734	.19991027
				US 2000-695143	20001025
				JP 1999-305734	A 19991027

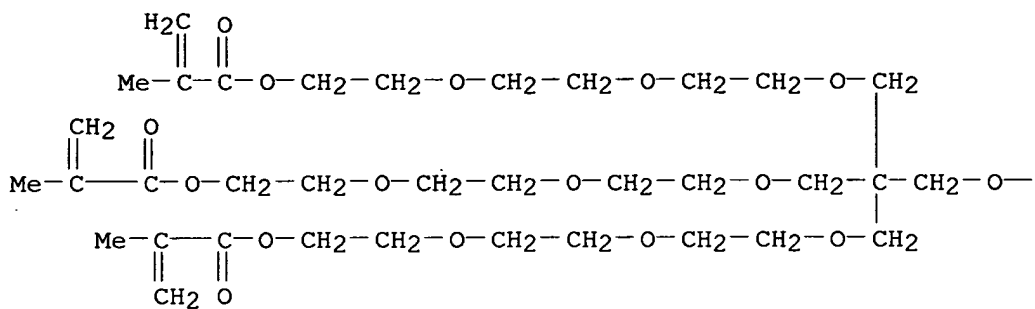
AB The invention relates to a lithog. printing plate precursor comprising a photopolymerizable composition and to a neg. charged lithog. printing plate precursor having high sensitivity to visible light, high mech. strength and excellent highlight characteristics. A lithog. printing plate precursor is disclosed, comprising an Al support having thereon a photopolymerizable photosensitive layer which contains (a) an alkali-soluble urethane binder having  $\geq 1$  ethylenically unsatd. polymerizable group on the side chain thereof, (b) an addition polymerizable compound having an ethylenically unsatd. double bond, and (c) a photopolymn. initiator.

IT 337357-64-9 337357-67-2 337357-71-8  
 337357-76-3 337357-79-6  
 RL: NUU (Other use, unclassified); POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)  
 (lithog. printing plate precursor with photopolymerizable photosensitive layer containing alkali-soluble urethane binder of)

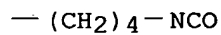
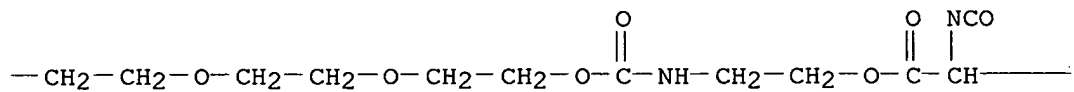
RN 337357-64-9 CAPLUS  
 CN Hexanoic acid, 2,6-diisocyanato-, 29,?,?,?,?,?-heptamethyl-4,28-dioxo-16,16-bis(13,?,?,?,?,?-tetramethyl-12-oxo-2,5,8,11-tetraoxatetradec-13-en-1-yl)-5,8,11,14,18,21,24,27-octaoxa-3-azatriacont-29-en-1-yl ester, polymer with  $\alpha$ -hydro- $\omega$ -hydroxypoly[oxy(methyl-1,2-ethanediyl)], 3-hydroxy-2-(hydroxymethyl)-2-methylpropanoic acid and 1,1'-methylenebis[4-isocyanatobenzene] (9CI) (CA INDEX NAME)

CM 1

CRN 337357-63-8  
 CMF C64 H109 N3 O24  
 CCI IDS



12 ( D1-Me )

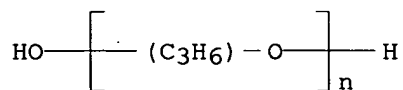


CM 2

CRN 25322-69-4

CMF (C3 H6 O)n H2 O

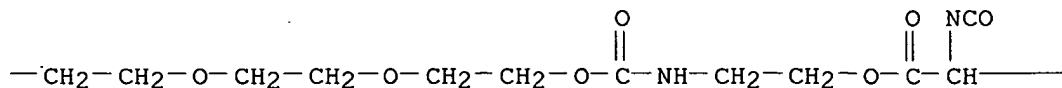
CCI IDS, PMS

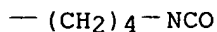


CM 3

CRN 4767-03-7

CMF C5 H10 O4



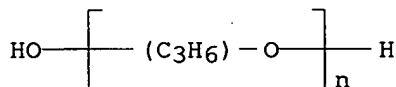


CM 2

CRN 25322-69-4

CMF (C3 H6 O)n H2 O

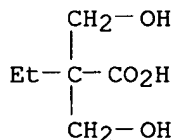
CCI IDS, PMS



CM 3

CRN 10097-02-6

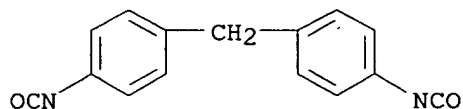
CMF C6 H12 O4



CM 4

CRN 101-68-8

CMF C15 H10 N2 O2



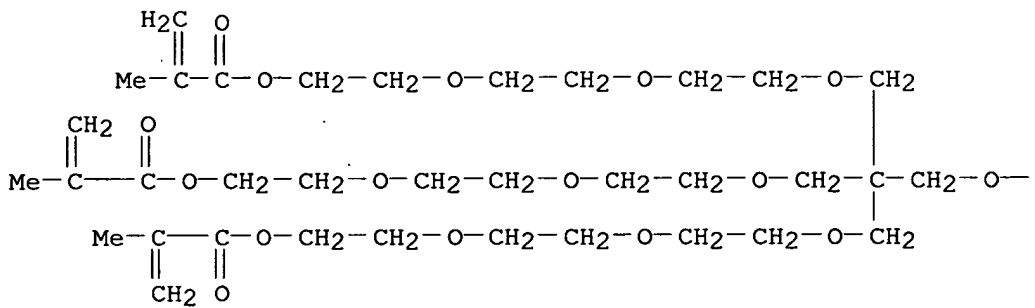
RN 337357-71-8 CAPLUS

CN Hexanoic acid, 2,6-diisocyanato-, 29,?, ?, ?, ?, ?, ?-heptamethyl-4,28-dioxo-16,16-bis(13,?, ?, ?-tetramethyl-12-oxo-2,5,8,11-tetraoxatetradec-13-en-1-yl)-5,8,11,14,18,21,24,27-octaoxa-3-azatriacont-29-en-1-yl ester, polymer with 1,3-diisocyanatomethylbenzene,  $\alpha$ -hydro- $\omega$ -hydroxypoly[oxy(methyl-1,2-ethanediyl)] and 3-hydroxy-2-(hydroxymethyl)-2-methylpropanoic acid (9CI) (CA INDEX NAME)

CM 1

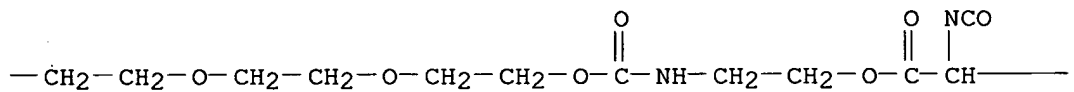
CRN 337357-63-8  
CMF C64 H109 N3 O24  
CCI IDS

PAGE 1-A

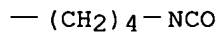


12 ( D1-Me )

PAGE 1-B

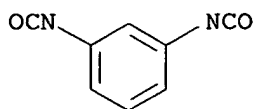


PAGE 1-C



CM 2

CRN 26471-62-5  
CMF C9 H6 N2 O2  
CCI IDS



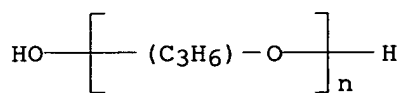
D1-Me

CM 3

CRN 25322-69-4

CMF (C3 H6 O)<sub>n</sub> H2 O

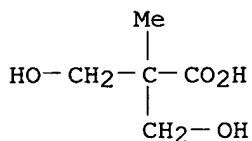
CCI IDS, PMS



CM 4

CRN 4767-03-7

CMF C5 H10 O4



RN 337357-76-3 CAPLUS

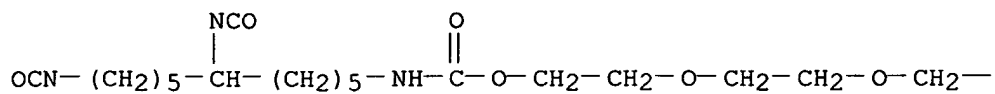
CN 2-Propenoic acid, 2-methyl-, 11-(19,24-diisocyanatotrimethyl-12-oxo-2,5,8,11-tetraoxa-13-azatetracos-1-yl)hexamethyl-11-(13,?,?,?-tetramethyl-12-oxo-2,5,8,11-tetraoxatetradec-13-en-1-yl)-3,6,9,13,16,19-hexaoxaheneicosane-1,21-diyl ester, polymer with 1,3-diisocyanatomethylbenzene, α-hydro-ω-hydroxypoly[oxy(methyl-1,2-ethanediyl)] and 3-hydroxy-2-(hydroxymethyl)-2-methylpropanoic acid (9CI) (CA INDEX NAME)

CM 1

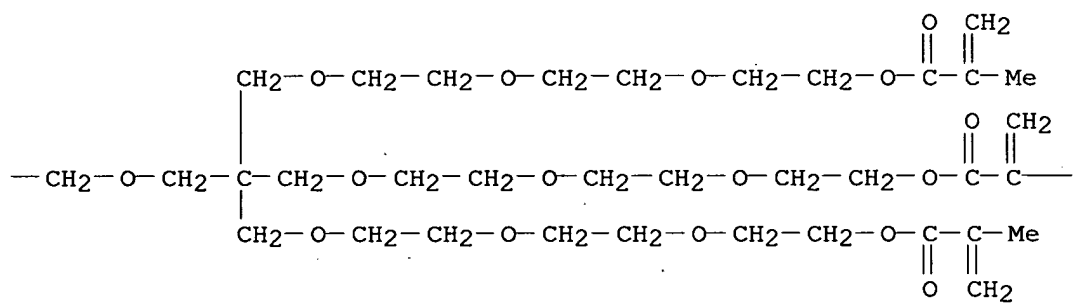
CRN 337357-75-2

CMF C67 H117 N3 O22

CCI IDS



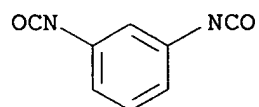
12 ( D1-Me )



---Me

CM 2

CRN 26471-62-5  
CMF C9 H6 N2 O2  
CCI IDS



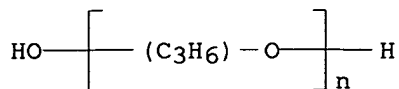
D1-Me

CM 3

CRN 25322-69-4

CMF (C3 H6 O)<sub>n</sub> H2 O

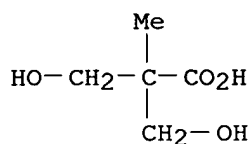
CCI IDS, PMS



CM 4

CRN 4767-03-7

CMF C5 H10 O4



RN 337357-79-6 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 11-[20-isocyanato-17-(isocyanatomethyl)trimethyl-12-oxo-2,5,8,11-tetraoxa-13-azaeicos-1-yl]hexamethyl-11-(13,?,?,?-tetramethyl-12-oxo-2,5,8,11-tetraoxatetradec-13-en-1-yl)-3,6,9,13,16,19-hexaoxaheneicosane-1,21-diyl ester, polymer with 1,3-diisocyanatomethylbenzene,  $\alpha$ -hydro- $\omega$ -hydroxypoly[oxy(methyl-1,2-ethanediyl)] and 3-hydroxy-2-(hydroxymethyl)-2-methylpropanoic acid (9CI) (CA INDEX NAME)

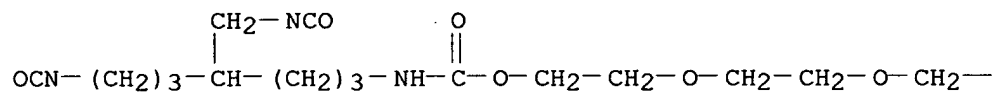
CM 1

CRN 337357-78-5

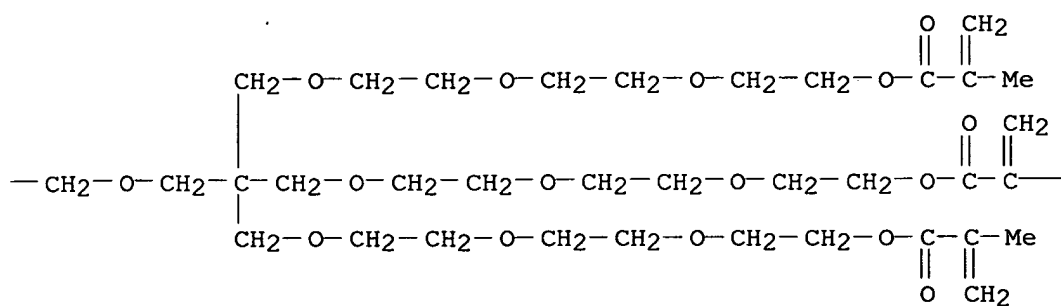
CMF C64 H111 N3 O22

CCI IDS

PAGE 1-A



PAGE 1-B

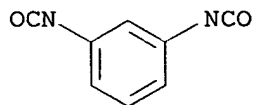


PAGE 1-C

---Me

CM 2

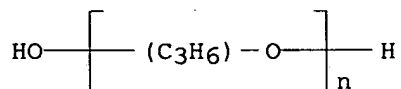
CRN 26471-62-5  
CMF C9 H6 N2 O2  
CCI IDS



D1-Me

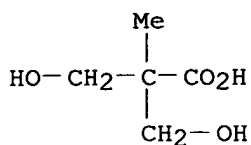
CM 3

CRN 25322-69-4  
CMF (C3 H6 O)<sub>n</sub> H2 O  
CCI IDS, PMS



CM 4

CRN 4767-03-7



RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 6 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:547249 CAPLUS

DN 131:272204

TI Syntheses of tetrakis( $\omega$ -hydroxypolyethyleneoxy) ether of pentaerythritol and their sulfonates

AU Chen, Jian; Weng, Ling - Ling; Zheng, Hu

CS College of Pharmacy, West China University of Medical Sciences, Chengdu, 610044, Peop. Rep. China

SO Youji Huaxue (1999), 19(4), 401-404

CODEN: YCHHDX; ISSN: 0253-2786

PB Kexue Chubanshe

DT Journal

LA Chinese

AB The syntheses of tetrakis( $\omega$ -hydroxypolyoxyethylene) ether of pentaerythritol and tetrakis[ $\omega$ -(p-toluenesulfonyl)oxypolyoxyethylene] ether of pentaerythritol were reported. The new compds. were characterized by IR, NMR, MS spectra and elemental anal.

IT **245352-47-0P 245352-48-1P**

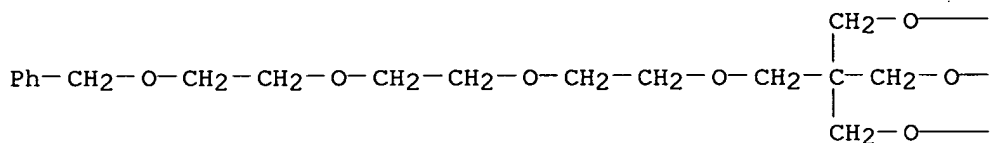
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(in preparation of tetrakis( $\omega$ -hydroxypolyoxyethylene) ether of pentaerythritol and sulfonates)

RN 245352-47-0 CAPLUS

CN 2,5,8,11,15,18,21,24-Octaoxapentacosane, 1,25-diphenyl-13,13-bis(12-phenyl-2,5,8,11-tetraoxadodec-1-yl)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

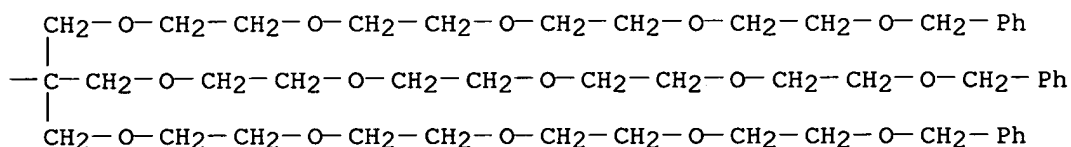
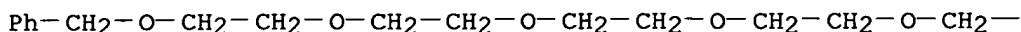
—CH<sub>2</sub>—CH<sub>2</sub>—O—CH<sub>2</sub>—CH<sub>2</sub>—O—CH<sub>2</sub>—CH<sub>2</sub>—O—CH<sub>2</sub>—Ph

——CH<sub>2</sub>—CH<sub>2</sub>—O—CH<sub>2</sub>—CH<sub>2</sub>—O—CH<sub>2</sub>—CH<sub>2</sub>—O—CH<sub>2</sub>—Ph

—CH<sub>2</sub>—CH<sub>2</sub>—O—CH<sub>2</sub>—CH<sub>2</sub>—O—CH<sub>2</sub>—CH<sub>2</sub>—O—CH<sub>2</sub>—Ph

RN 245352-48-1 CAPLUS

CN 2,5,8,11,14,18,21,24,27,30-Decaoxahentriacontane, 1,31-diphenyl-16,16-bis(15-phenyl-2,5,8,11,14-pentaoxapentadec-1-yl)- (9CI) (CA INDEX NAME)



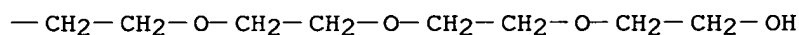
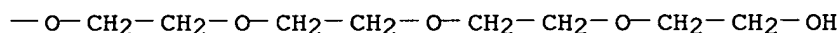
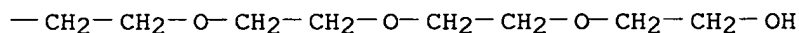
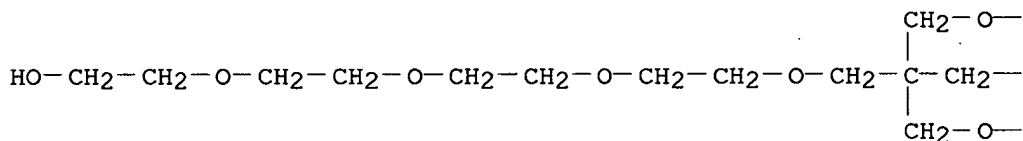
## IT 172355-08-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of tetrakis( $\omega$ -hydroxypolyoxyethylene) ether of pentaerythritol and sulfonates)

RN 172355-08-7 CAPLUS

CN 3,6,9,12,16,19,22,25-Octaoxaheptacosane-1,27-diol, 14,14-bis(13-hydroxy-2,5,8,11-tetraoxatridec-1-yl)- (9CI) (CA INDEX NAME)



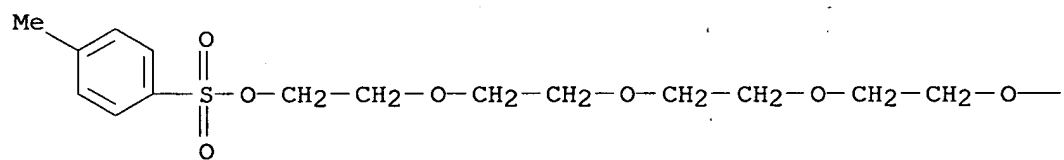
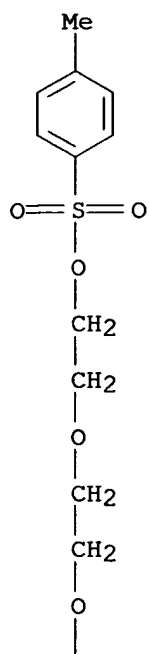
## IT 172355-11-2P

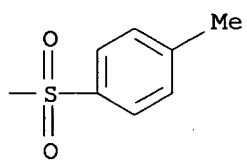
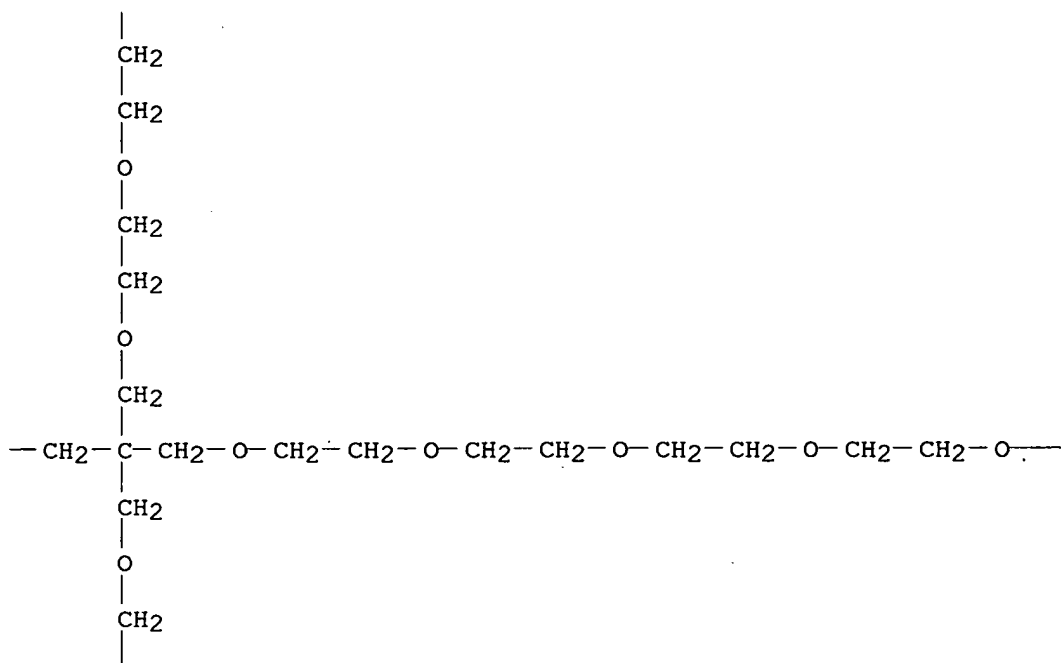
RL: SPN (Synthetic preparation); PREP (Preparation)

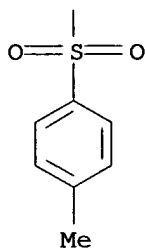
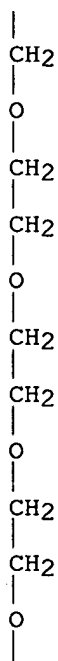
(preparation of tetrakis[ $\omega$ -(p-toluenesulfonyl)oxypolyoxyethylene] ether of pentaerythritol)

RN 172355-11-2 CAPLUS

CN 3,6,9,12,16,19,22,25-Octaoxaheptacosane-1,27-diol, 14,14-bis[13-[[[4-methylphenyl)sulfonyl]oxy]-2,5,8,11-tetraoxatridec-1-yl]-, bis(4-methylbenzenesulfonate) (9CI) (CA INDEX NAME)







L20 ANSWER 7 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1997:385397 CAPLUS

DN 127:19951

TI Dispersants for inorganic pigments, cement, agrochemicals, scales, detergent builders, drilling mud, etc.

IN Hisada, Nobuo; Yamashita, Seiji; Ida, Yoshimi; Yamauchi, Sunao; Saito, Takao

PA Sanyo Chemical Industries Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 25 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	JP 09100302	A2	19970415	JP 1996-213052	19960723
	JP 3157466	B2	20010416		
				JP 1995-209026	A 19950724
				JP 1995-209027	A 19950724
				JP 1995-209028	A 19950724
				JP 1995-209029	A 19950724

			JP 1995-215227	A	19950731
			JP 1995-215228	A	19950731
			JP 1995-216684	A	19950801
			JP 1995-216685	A	19950801
JP 2000169654	A2	20000620	JP 1999-346070		19950724
			JP 1995-209026	A	19950724
			JP 1995-209027	A	19950724
			JP 1995-209028	A	19950724
			JP 1995-209029	A	19950724
			JP 1996-213052	A3	19950724
			JP 1995-215227	A	19950731
			JP 1995-215228	A	19950731
			JP 1995-216684	A	19950801
			JP 1995-216685	A	19950801
JP 2001087640	A2	20010403	JP 2000-234914		19960723
			JP 1995-209026	A	19950724
			JP 1995-209027	A	19950724
			JP 1995-209028	A	19950724
			JP 1995-209029	A	19950724
			JP 1995-215227	A	19950731
			JP 1995-215228	A	19950731
			JP 1995-216684	A	19950801
			JP 1995-216685	A	19950801
			JP 1996-213052	A3	19960723

AB The title dispersants contain  $\alpha, \beta$ -unsatd. carboxylic acid (salt) polymers obtained in the presence of radical polymerization initiators and

chain-transfer agents  $Q[(CO)pO(X1xA1(CO)rX2)m(CO)qA2Z]n$  ( $Q$  = polyvalent organic group;  $X1 = CO, CONH$ ;  $A1, A2$  = divalent organic group;  $X2 = O, S, NH$ ;  $Z$  = chain-transfer group;  $p, q, r, x = 0, 1$ ;  $m = 0-50$ ;  $n = 2-100$ ). Acrylic acid was redox-polymerized in the presence of  $HS(CH_2CH_2O)_2CH_2CH_2SH$  and neutralized with NaOH to obtain a polymer salt with peak top mol. weight 12,100 and low-mol.-weight content 0.5%. A dispersion from water 30, the above product 0.2, and heavy  $CaCO_3$  powder 70 parts showed viscosity 300 cP as-prepared and 420 cP after 7 days, compared with 600 and 1300, resp., for a control using the polymer dispersant prepared using dodecyl mercaptan as the chain-transfer agent.

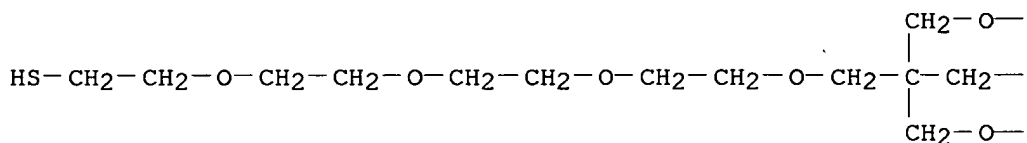
IT 190068-60-1

RL: RCT (Reactant); RACT (Reactant or reagent)  
(chain-transfer agent; dispersants for inorg. pigments, cement, agrochems., scales, detergent builders, drilling mud)

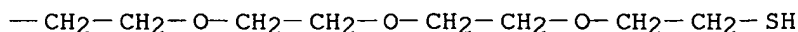
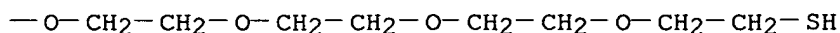
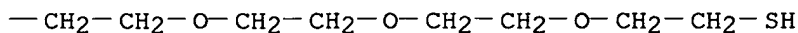
RN 190068-60-1 CAPLUS

CN 3,6,9,12,16,19,22,25-Octaoxaheptacosane-1,27-dithiol, 14,14-bis(13-mercapto-2,5,8,11-tetraoxatridec-1-yl)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L20 ANSWER 8 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN  
 AN 1996:393925 CAPLUS  
 DN 125:60897  
 TI Polyol esters of ether carboxylic acids as fiber lubricants  
 IN Tuller, F. Norman; Allen, Michael E.  
 PA Henkel Corporation, USA  
 SO PCT Int. Appl., 26 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9606824	A1	19960307	WO 1995-US10420	19950823
	W: CN, KR				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 5576470	A	19961119	US 1994-297282	A 19940829
	EP 778822	A1	19970618	US 1994-297282	19940829
	EP 778822	B1	20010620	EP 1995-929564	19950823
	R: CH, DE, LI, NL				
				US 1994-297282	A 19940829
				WO 1995-US10420	W 19950823
	US 5654038	A	19970805	US 1996-705441	19960829
				US 1994-297282	A3 19940829

OS MARPAT 125:60897

AB The esters [R3Z1Z2m(CH2)nCO2CH2]pCR1qR2r [R3 = C4-22 alkyl; R1, R2 = C1-22 alkyl; Z1 = S or O; Z2 = C2H4O and/or C3H6O; m = 1-20; n = 1-6; p = 2-4; q, r = 0-2; q + p + r = 4] are useful as heat-resistant, water-dispersible lubricants for fibers. Reaction of pentaethylene glycol mono-octyl ether with ClCH2CO2Na at 50-75° in the presence of tert-BuOK have C8H17(OCH2CH2)5OCH2CO2H, esterification of which with pentaerythritol in the presence of H3PO2 at 190-195° gave approx.99% tetraester with viscosity 210 cP at 25°, good dispersibility in H2O, weight loss at 365° 74.0%, fiber-metal friction (100 m/min) 45.8, and fiber-fiber friction (50 m/min) 14.9; vs. 50, insol., 75.1, 23.2, and 13.2, resp., for pentaerythritol tetracaprylate.

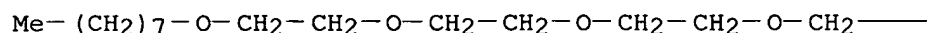
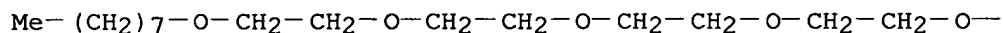
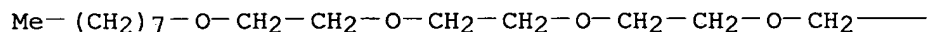
IT 178245-20-0P

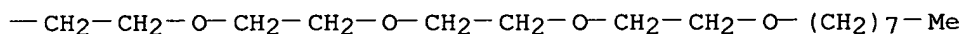
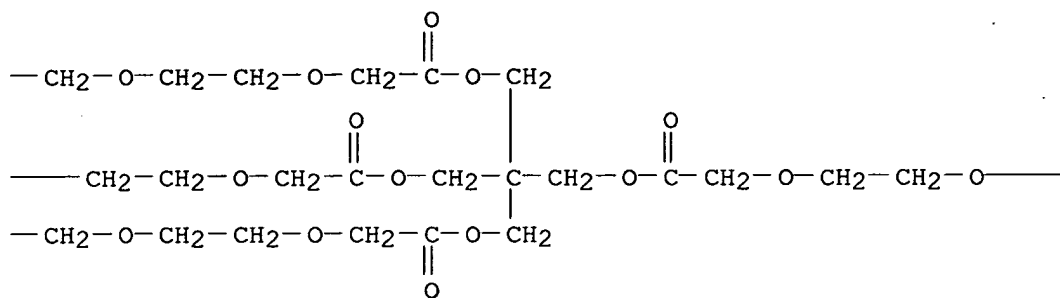
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (polyol esters of ether carboxylic acids as fiber lubricants)

RN 178245-20-0 CAPLUS

CN 3,6,9,12,15,18-Hexaoxahexacosanoic acid, 2,2-bis(3-oxo-2,5,8,11,14,17,20-heptaooxaoctacos-1-yl)-1,3-propanediyl ester (9CI) (CA INDEX NAME)

PAGE 1-A





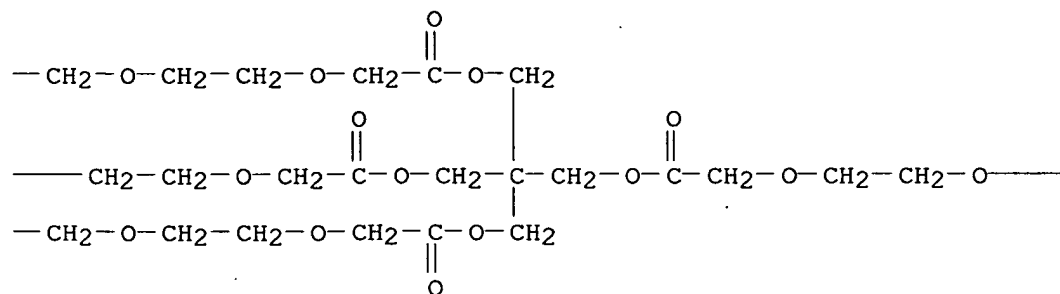
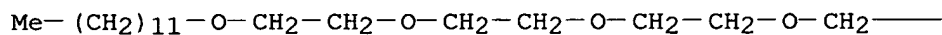
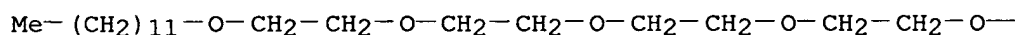
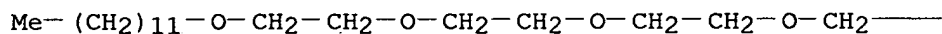
IT 178245-25-5P 178245-26-6P 178245-27-7P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

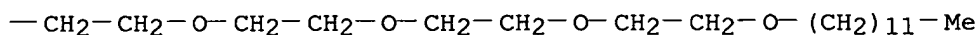
(preparation and esterification with fatty acids)

RN 178245-25-5 CAPLUS

CN 3,6,9,12,15,18-Hexaoxatriacontanoic acid, 2,2-bis(3-oxo-2,5,8,11,14,17,20-heptaoxadotriacont-1-yl)-1,3-propanediyl ester (9CI) (CA INDEX NAME)



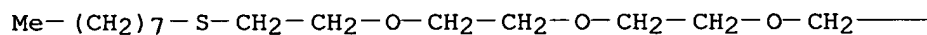
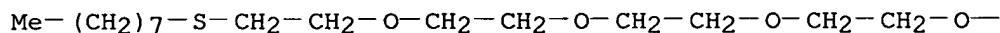
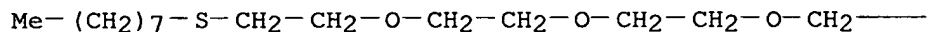
PAGE 1-C



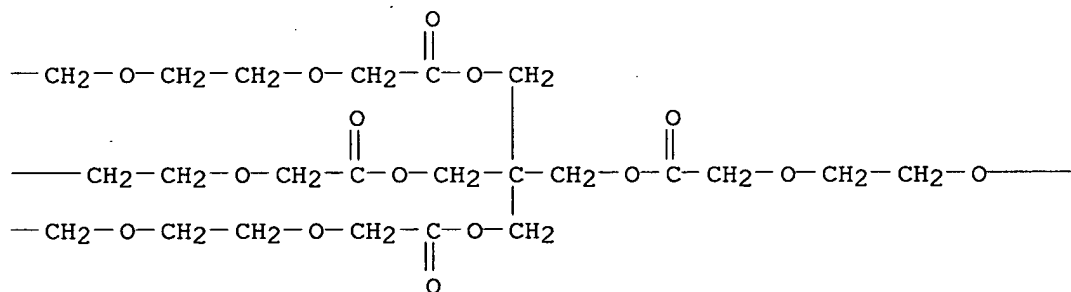
RN 178245-26-6 CAPLUS

CN 3,6,9,12,15-Pentaoxa-18-thiahexacosanoic acid, 2,2-bis(3-oxo-2,5,8,11,14,17-hexaoxa-20-thiaoctacos-1-yl)-1,3-propanediyl ester (9CI)  
(CA INDEX NAME)

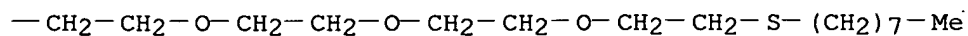
PAGE 1-A



PAGE 1-B

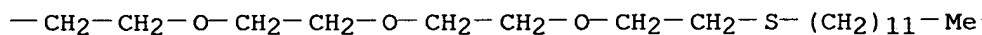
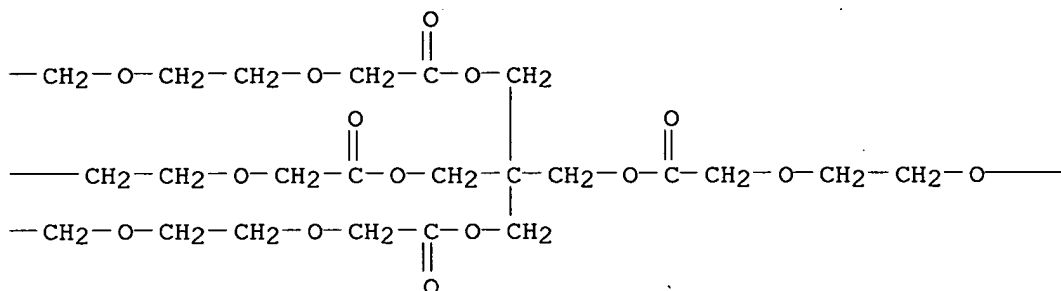
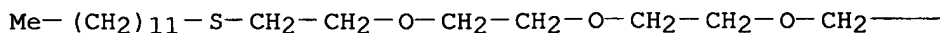
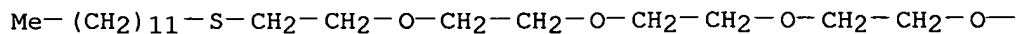
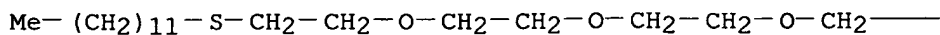


PAGE 1-C



RN 178245-27-7 CAPLUS

CN 3,6,9,12,15-Pentaoxa-18-thiatriacontanoic acid, 2,2-bis(3-oxo-2,5,8,11,14,17-hexaoxa-20-thiadotriacont-1-yl)-1,3-propanediyl ester (9CI)



L20 ANSWER 9 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1995:995241 CAPLUS

DN 124:57081

TI Dendritic aliphatic polyethers, their preparation and use

IN Gozzini, Luigia; Muttoni, Monica; De Haen, Christoph

PA Bracco S.p.A., Italy; Dibra S.p.A.

SO PCT Int. Appl., 83 pp.

CODEN: PIXXD2

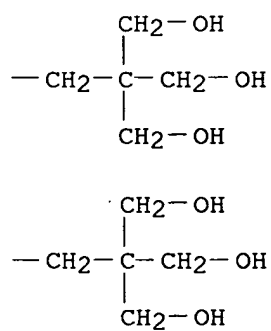
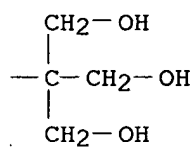
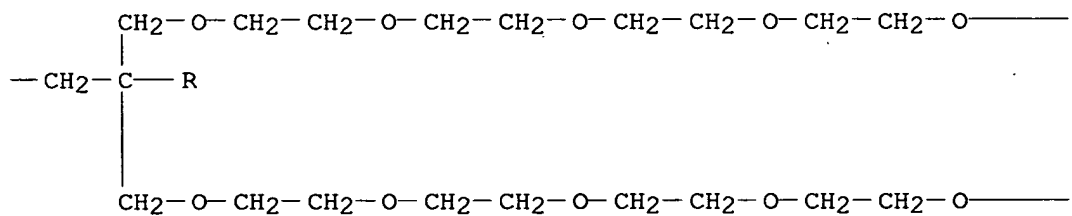
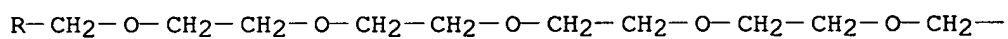
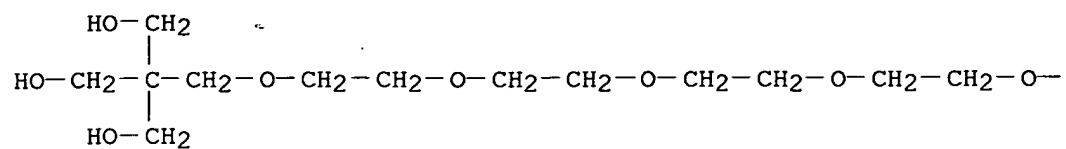
DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9525763	A1	19950928	WO 1995-EP943	19950314
	W: AT, AU, BG, CA, CH, CN, CZ, DE, DK, ES, FI, GB, HU, JP, KR, LU, NL, NO, NZ, PL, PT, RO, RU, SE, UA				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
				IT 1994-MI512	A 19940318

CA 2185647	AA	19950928	CA 1995-2185647	19950314
AU 9520703	A1	19951009	IT 1994-MI512	A 19940318
AU 689244	B2	19980326	AU 1995-20703	19950314
EP 750649	A1	19970102	IT 1994-MI512	A 19940318
EP 750649	B1	20011219	WO 1995-EP943	W 19950314
R: AT, BE, CH, DE, DK, ES, FR, GB, IE, IT, LI, NL, PT, SE			EP 1995-913106	19950314
			IT 1994-MI512	A 19940318
			WO 1995-EP943	W 19950314
JP 09510489	T2	19971021	JP 1995-524352	19950314
			IT 1994-MI512	A 19940318
			WO 1995-EP943	W 19950314
AT 211155	E	20020115	AT 1995-913106	19950314
			IT 1994-MI512	A 19940318
			WO 1995-EP943	W 19950314
US 5780644	A	19980714	US 1995-404259	19950315
			IT 1994-MI512	A 19940318
ZA 9502165	A	19951214	ZA 1995-2165	19950316
			IT 1994-MI512	A 19940318
IL 113004	A1	20000831	IL 1995-113004	19950316
			IT 1994-MI512	A 19940318
FI 9603646	A	19960916	FI 1996-3646	19960916
			IT 1994-MI512	A 19940318
			WO 1995-EP943	W 19950314
NO 9603872	A	19960916	NO 1996-3872	19960916
			IT 1994-MI512	A 19940318
			WO 1995-EP943	A 19950314
US 5886110	A	19990323	US 1998-69958	19980430
			IT 1994-MI512	A 19940318
			US 1995-404259	A3 19950315
AB	The dendrimers are composed essentially of a central nucleus and a series of polyoxyalkylene chains that depart from the nucleus and spread into the surrounding space, branching in a cascade fashion, and are used in drug delivery, as calibration stds. for size-exclusion chromatog., and as catalyst supports. Thus, ClCH <sub>2</sub> CH <sub>2</sub> OCH <sub>2</sub> CH <sub>2</sub> OH was treated with 3,4-dihydro-2H-pyran to protect the OH group and then condensed with pentaerythritol, first in alc. containing NaOH and Bu <sub>4</sub> NBr, then with addition of			
of	tetraoctylammonium bromide and NaI, and finally with Et <sub>4</sub> NOH to give the first generation dendrimer in 54% yield. The protective pyranyl groups were removed, and the resulting alcs. were tosylated and converted to the bromides, which were condensed with 4-(hydroxymethyl)-2,6,7-trioxabicyclo[2.2.2]octane (pentaerythritol orthoformate) to introduce the next branching point, and the process was repeated.			
IT	<b>172355-01-0P</b>			
	RL: IMF (Industrial manufacture); PREP (Preparation) (preparation of dendritic aliphatic polyethers)			
RN	172355-01-0 CAPLUS			
CN	4,7,10,13,16,20,23,26,29,32-Decaoxapentatriacontane-1,35-diol, 18,18-bis[17-hydroxy-16,16-bis(hydroxymethyl)-2,5,8,11,14-pentaoxaheptadec-1-yl]-2,2,34,34-tetrakis(hydroxymethyl)- (9CI) (CA INDEX NAME)			



IT 172354-98-2P 172354-99-3P 172355-08-7P,

Tetraethylene glycol pentaerythritol ether (4:1) 172355-11-2P

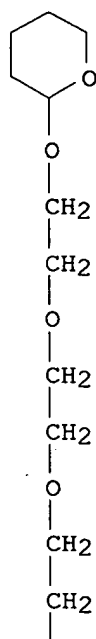
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

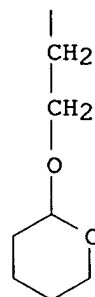
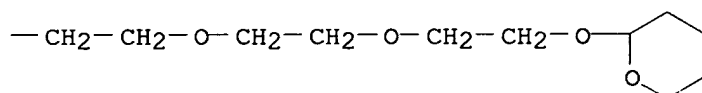
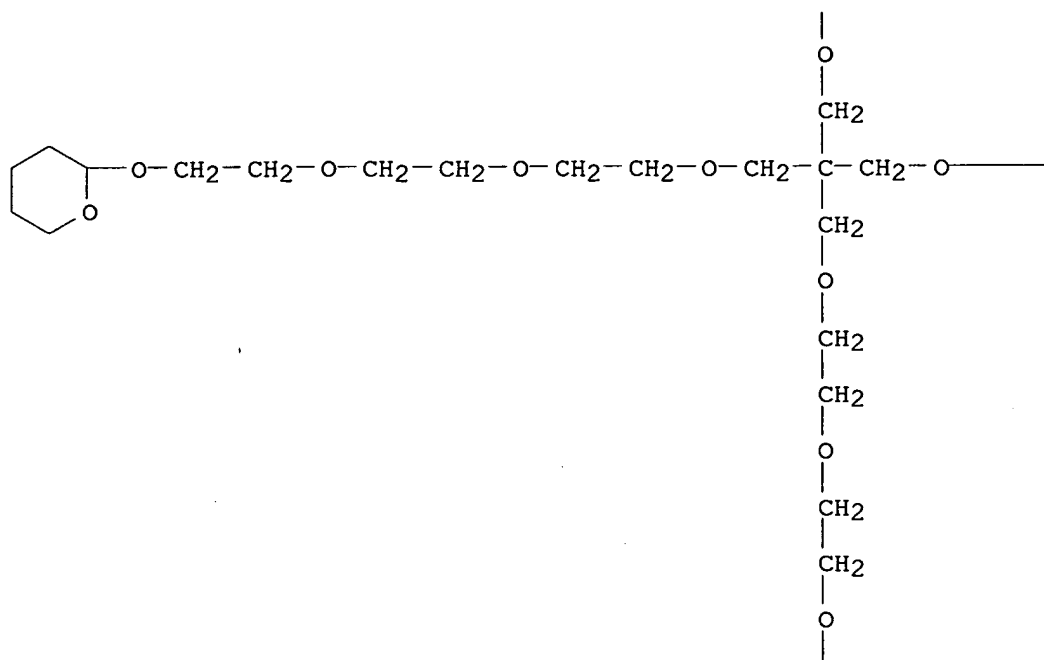
(preparation of dendritic aliphatic polyethers)

RN 172354-98-2 CAPLUS

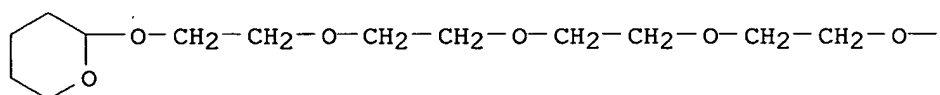
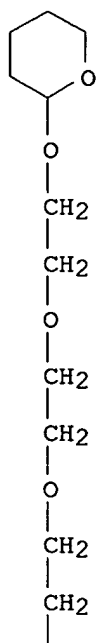
CN 2H-Pyran, 2,2'-[[11,11-bis[[2-[2-[2-[(tetrahydro-2H-pyran-2-yl)oxy]ethoxy]ethoxy]ethoxy]methyl]-3,6,9,13,16,19-hexaoxaheneicosane-1,21-diyl]bis(oxy)]bis[tetrahydro- (9CI) (CA INDEX NAME)

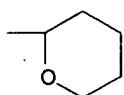
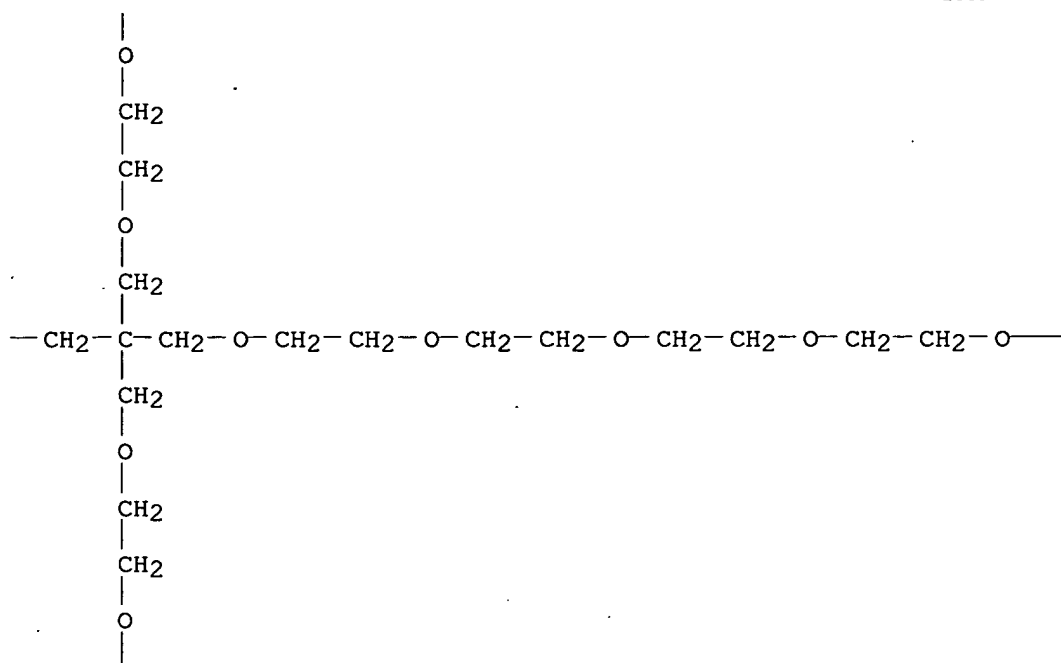
PAGE 1-A

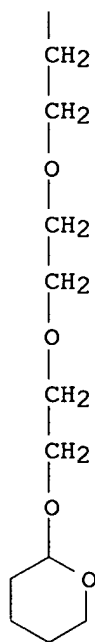




RN 172354-99-3 CAPLUS  
 CN 2H-Pyran, 2,2'-[[14,14-bis[13-[(tetrahydro-2H-pyran-2-yl)oxy]-2,5,8,11-tetraoxatridec-1-yl]-3,6,9,12,16,19,22,25-octaoxaheptacosane-1,27-diyl]bis(oxy)]bis[tetrahydro- (9CI) (CA INDEX NAME)

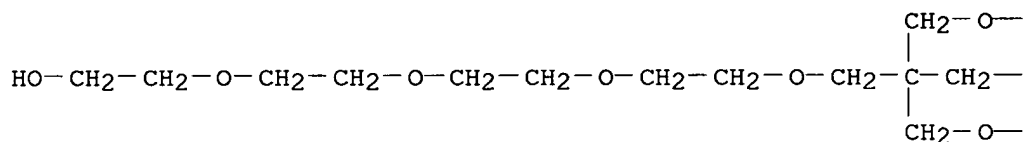




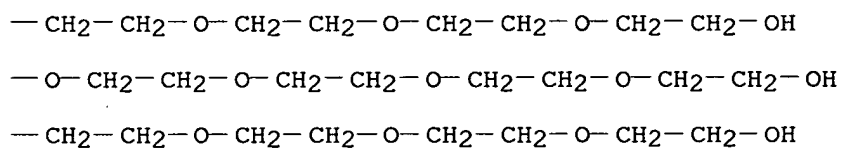


RN 172355-08-7 CAPLUS  
 CN 3,6,9,12,16,19,22,25-Octaoxaheptacosane-1,27-diol, 14,14-bis(13-hydroxy-2,5,8,11-tetraoxatridec-1-yl)- (9CI) (CA INDEX NAME)

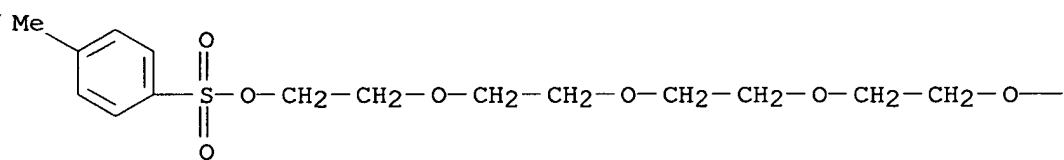
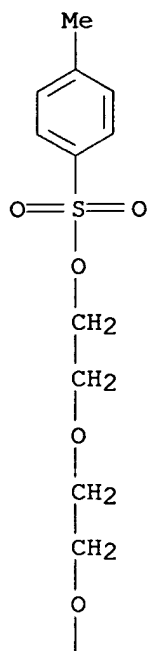
PAGE 1-A

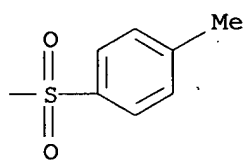
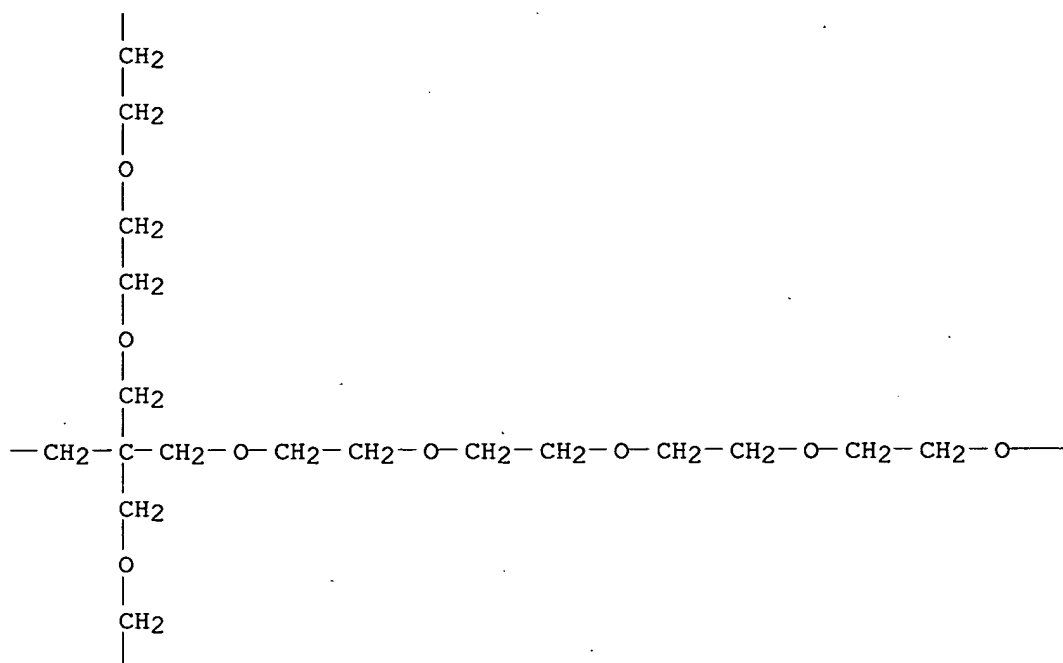


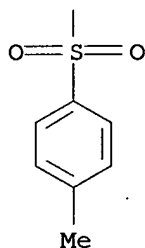
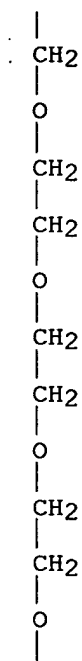
PAGE 1-B



RN 172355-11-2 CAPLUS  
 CN 3,6,9,12,16,19,22,25-Octaoxaheptacosane-1,27-diol, 14,14-bis[13-[[4-methylphenyl)sulfonyl]oxy]-2,5,8,11-tetraoxatridec-1-yl]-, bis(4-methylbenzenesulfonate) (9CI) (CA INDEX NAME)







L20 ANSWER 10 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1995:516563 CAPLUS

DN 122:295164

TI Water/oil separation-type rolling fluids for aluminum hot rolling, and the rolling method using the fluids

IN Mase, Toshiaki; Hosomi, Kazuhiro

PA Sumitomo Light Metal Industries, Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
PI	JP 07041790	A2	19950210	JP 1993-207157	19930729
				JP 1993-207157	19930729

OS MARPAT 122:295164

AB The fluids contain mineral oils and 5-100% additives selected from alkoxyalkyl esters of  $\text{R}_2\text{COO}(\text{C}_2\text{H}_4\text{O})_n\text{R}_1$  ( $n$  = integer of 1-3,  $\text{R}_1$  = C7-22-alkyl,  $\text{R}_2$  = C9-21-alkyl), neopentyl glycols of  $\text{Me}_2\text{C}(\text{CH}_2\text{OCOR}_3)\text{CH}_2\text{OH}$  and  $\text{Me}_2\text{C}[\text{CH}_2\text{O}(\text{C}_2\text{H}_4\text{O})_n\text{COR}_4]_2$  ( $n$  = integer of 1-3,  $\text{R}_3$ -4 = C10-21-alkyl),

trimethylolpropanes of  $C_2H_5C(CH_2OCOR_5)_2CH_2OH$  and  $C_2H_5C[CH_2O(C_2H_4O)_nCOR_6]_3$  ( $n$  = integer of 1-3,  $R_5$ -6 = C10-21-alkyl), and pentaerythritols of  $C(CH_2OCOR_7)_3CH_2OH$  and  $C[CH_2O(C_2H_4O)_nCOR_8]_4$  ( $n$  = integer of 1-3,  $R_7$ -8 = C9-21-alkyl). The rolling method involves the following steps; (1) press fitting of the fluids into water, and mixing by adjusting the concentration of the fluids to 1-20% to give aqueous emulsions, and (2) hot rolling of Al by supplying the emulsions into the rolls through nozzles. The fluids show high lubrication at high temperature, and are capable of ultrafiltration for recycling.

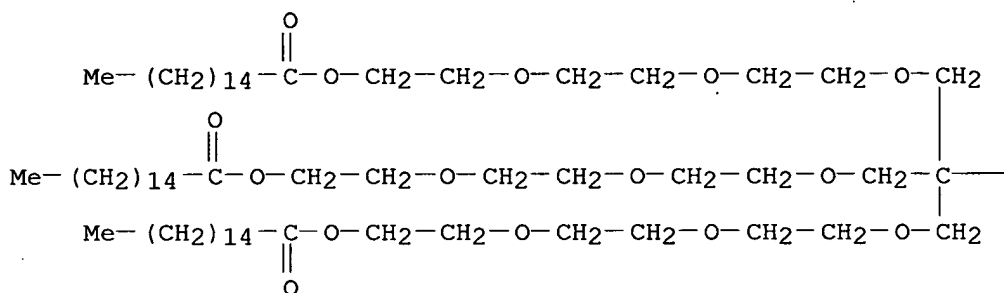
IT 163350-02-5

RL: TEM (Technical or engineered material use); USES (Uses)  
(in water/oil separation-type rolling fluids for aluminum (alloy) hot rolling)

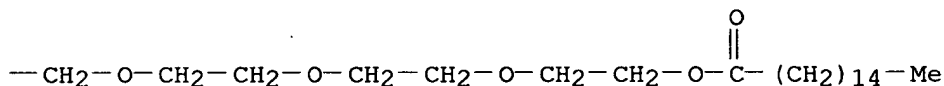
RN 163350-02-5 CAPLUS

CN Hexadecanoic acid, 11,11-bis(12-oxo-2,5,8,11-tetraoxaheptacos-1-yl)-3,6,9,13,16,19-hexaoxaheneicosane-1,21-diyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L20 ANSWER 11 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1990:436411 CAPLUS

DN 113:36411

TI Preparation of p-menthane-3,8-diol-containing copolymers as insecticides, pest repellents and plant growth regulators

IN Nishimura, Hiroyuki; Yasukochi, Toru; Honda, Susumu; Akimoto, Shinichi

PA Nippon Oils & Fats Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 01197512	A2	19890809	JP 1988-18572	19880130
				JP 1988-18572	19880130

AB Polyalkylene glycol ethers of p-menthane-3,8-diol containing  $B[O(AO)lR_1]a[O(AO)mR_2]b[O(AO)nH]c$  ( $B$  = residue of a compound containing 2-8

OH-groups; AO = C2-18 oxyalkylene; R1 = C2-5 alkenyl; R2 = C1-24 hydrocarbyl; a = 1-8; b = 0-7; c = 0-7; a + b + c = 2-8; l, m, n ≥ 0) are prepared CH<sub>2</sub>:CHCH<sub>2</sub>O(C<sub>3</sub>H<sub>6</sub>O)<sub>5</sub>(C<sub>2</sub>H<sub>4</sub>O)<sub>15</sub>Me 1022 g, maleic anhydrous 103 g, and Bz2O2 12 g 1L toluene were polymerized under N at 80° for 7 h. After distilling off the excess of maleic acid and toluene, 980 g maleic anhydrous copolymer was yielded. The final product (average mol. weight 13300) was

prepared by refluxing the resulting copolymer 110 g with 10.3 g p-menthane-3,8-diol under N at 100° for 4 h. The insecticidal, pest repellent, and plant growth regulator activities of I were demonstrated.

IT 127836-31-1P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, as insecticide and pest repellent and plant growth regulator)

RN 127836-31-1 CAPLUS

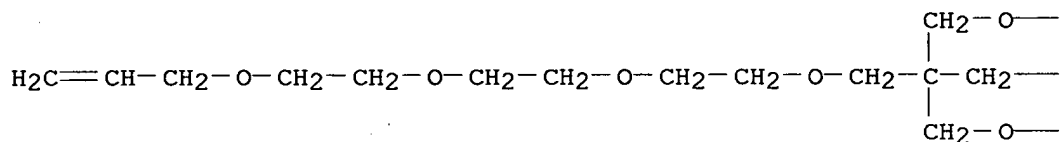
CN 2-Butenedioic acid (2Z)-, monoester with 2-hydroxy-α,α,4-trimethylcyclohexanemethanol, compd. with ethanamine (1:1), polymer with 15,15-di-2,5,5,8,11-tetraoxatetradec-13-en-1-yl-4,7,10,13,17,20,23,26-octaoxanonacosa-1,28-diene and methyloxirane polymer with oxirane methyl 2-propenyl ether (9CI) (CA INDEX NAME)

CM 1.

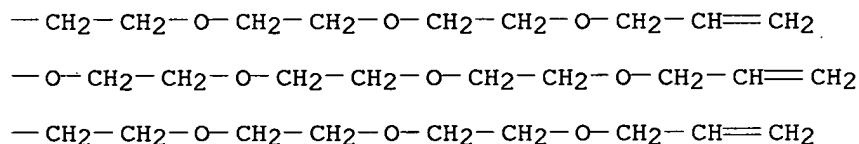
CRN 127836-29-7

CMF C41 H76 O16

PAGE 1-A



PAGE 1-B



CM 2

CRN 127836-30-0

CMF C14 H22 O5 . C2 H7 N

CM 3

CRN 75-04-7

CMF C2 H7 N

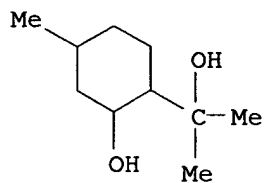


CM 4

CRN 127836-27-5  
CMF C14 H22 O5  
CCI IDS

CM 5

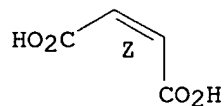
CRN 42822-86-6  
CMF C10 H20 O2



CM 6

CRN 110-16-7  
CMF C4 H4 O4

Double bond geometry as shown.

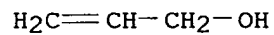


CM 7

CRN 52232-27-6  
CMF (C3 H6 O . C2 H4 O) x . C3 H6 O . C H4 O

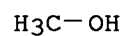
CM 8

CRN 107-18-6  
CMF C3 H6 O



CM 9

CRN 67-56-1  
CMF C H4 O



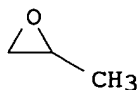
CM 10

CRN 9003-11-6

CMF (C3 H6 O . C2 H4 O)x  
CCI PMS

CM 11

CRN 75-56-9  
CMF C3 H6 O

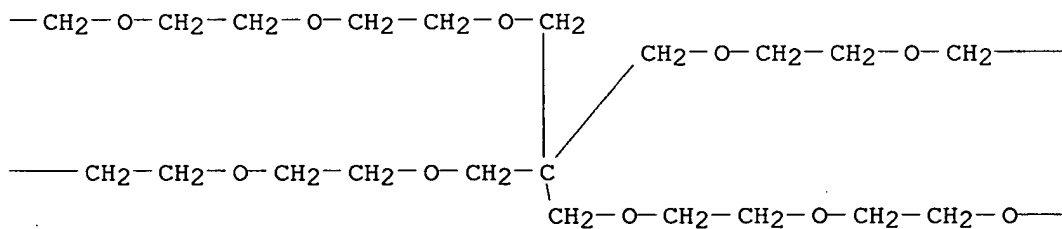
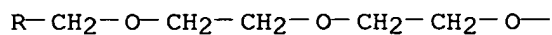
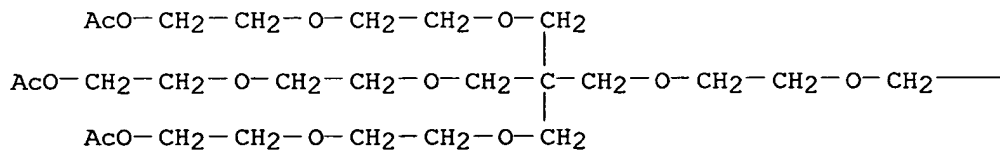
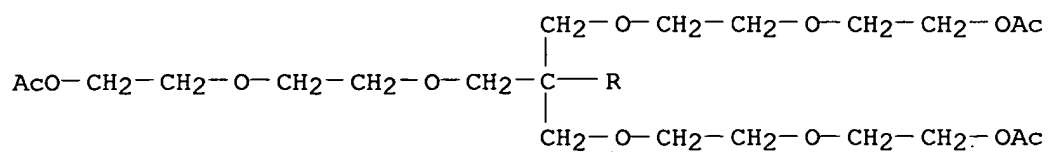


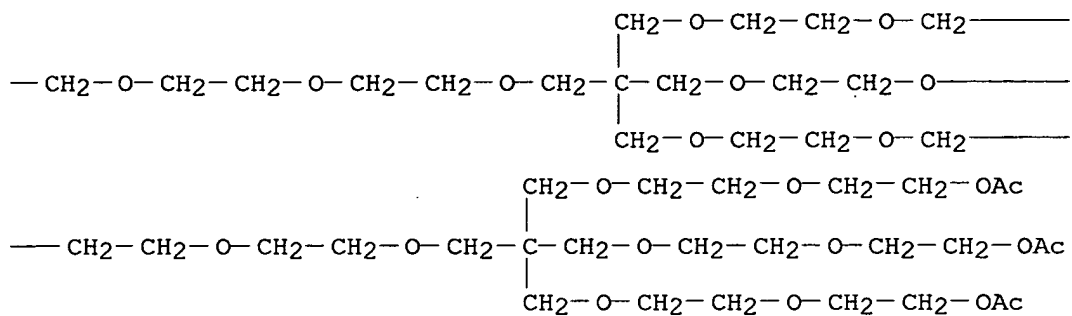
CM 12

CRN 75-21-8  
CMF C2 H4 O



L20 ANSWER 12 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 1990:216174 CAPLUS  
DN 112:216174  
TI Synthesis of cascadol - a highly branched, functionalized polyether  
AU Bochkov, A. F.; Kalganov, B. E.; Chernetskii, V. N.  
CS Inst. Khim. Fiz., Moscow, USSR  
SO Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya (1989), (10), 2394-5  
CODEN: IASKA6; ISSN: 0002-3353  
DT Journal  
LA Russian  
OS CASREACT 112:216174  
AB Cascadol C[CH2OCH2CH2OCH2CH2OCH2CH2OCH2CH2OCH2C(CH2OCH2CH2OCH2CH2OR)3]4  
was prepared as its dodecaacetate, starting from pentaerythritol via  
coupling reaction of C(CH2OCH2CH2OCH2CH2OH)4 and  
(Ph3COCH2CH2OCH2CH2OCH2)3CCH2OCH2CH2OCH2CH2OMs (Ms = methanesulfonyl).  
IT **126989-80-8P 127038-53-3P**  
RL: SPN (Synthetic preparation); PREP (Preparation  
(preparation of)  
RN 126989-80-8 CAPLUS  
CN 3,6,10,13,16,19,22,26,29,32,35,38,42,45-Tetradeca-oxaheptatetracontane-1,47-  
diol, 8,8,40,40-tetrakis[[2-[2-(acetyloxy)ethoxy]ethoxy]methyl]-24,24-  
bis[10,10-bis[[2-[2-(acetyloxy)ethoxy]ethoxy]methyl]-25-oxo-  
2,5,8,11,18,21,24-hepta-oxahexacos-1-yl]-, diacetate (9CI) (CA INDEX NAME)





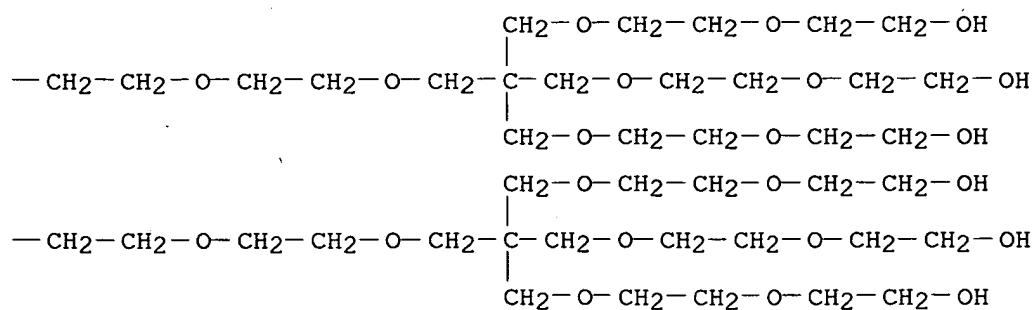
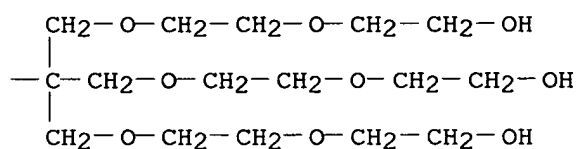
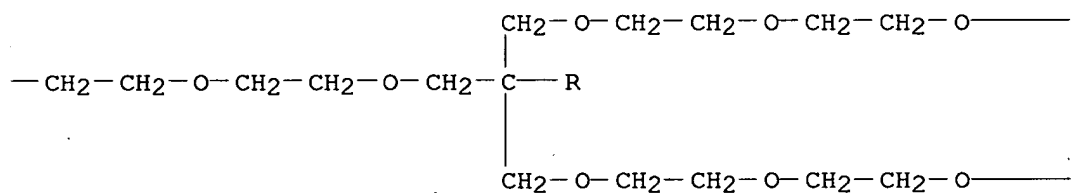
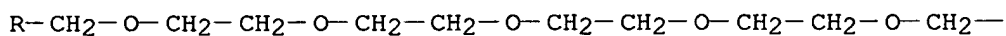
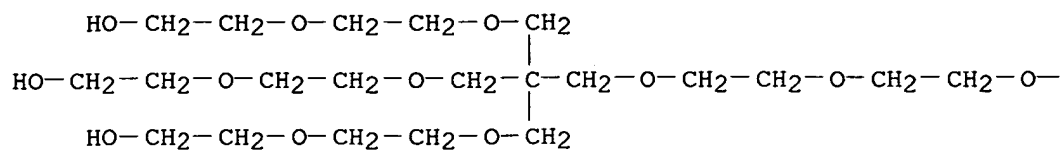
--- CH<sub>2</sub>---OAc

--- CH<sub>2</sub>---CH<sub>2</sub>---OAc

--- CH<sub>2</sub>---OAc

RN 127038-53-3 CAPLUS

CN 3,6,10,13,16,19,22,26,29,32,35,38,42,45-Tetradeca-oxaheptatetracontane-1,47-diol, 8,8,40,40-tetrakis[[2-(2-hydroxyethoxy)ethoxy]methyl]-24,24-bis[23-hydroxy-16,16-bis[[2-(2-hydroxyethoxy)ethoxy]methyl]-2,5,8,11,14,18,21-hepta-oxanonacos-1-yl]- (9CI) (CA INDEX NAME)



FAN.CNT 1

PI

AB

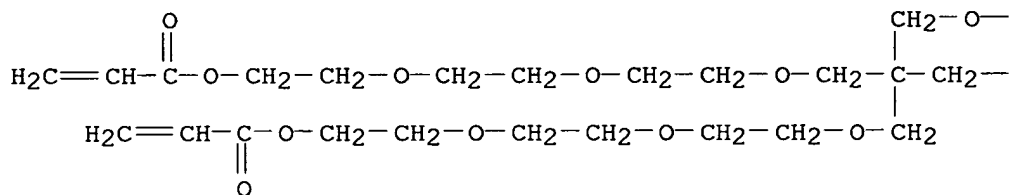
IT

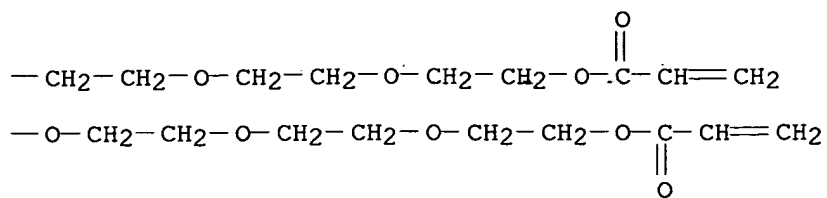
■

RN

CN

PAGE 1-A

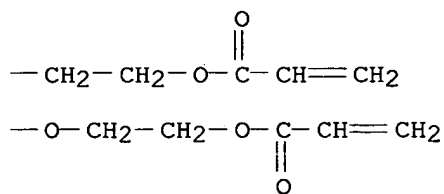
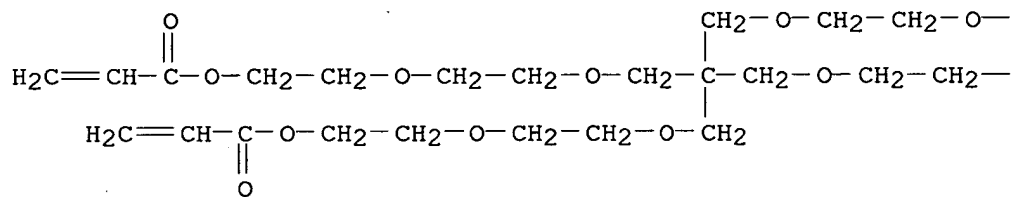




CM 2

CRN 125634-78-8

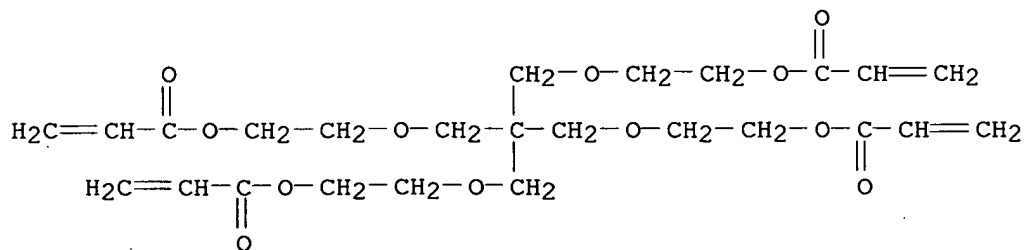
CMF C33 H52 O16



CM 3

CRN 125634-77-7

CMF C25 H36 O12

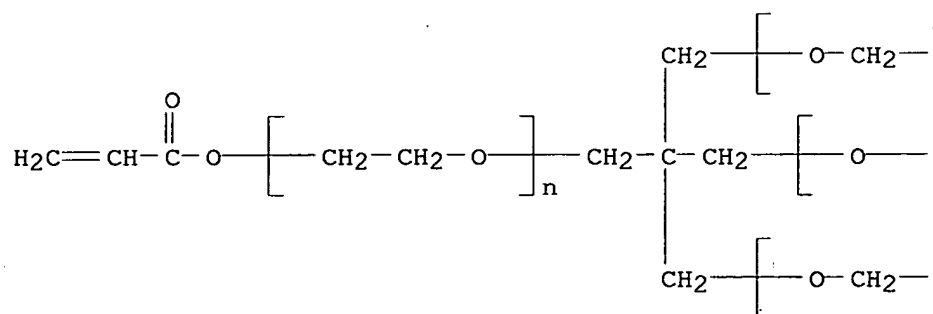


CM 4

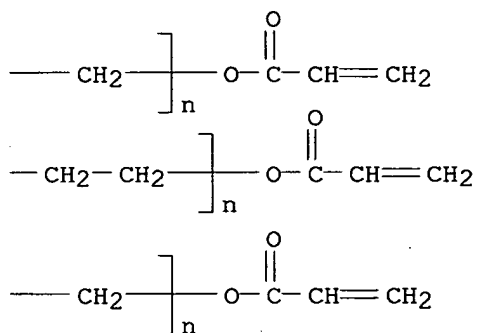
CRN 51728-26-8

CMF (C2 H4 O)n (C2 H4 O)n (C2 H4 O)n (C2 H4 O)n C17 H20 O8  
 CCI PMS

PAGE 1-A



PAGE 1-B



CM 5

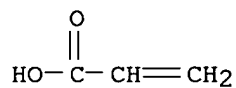
CRN 55818-57-0

CMF (C15 H16 O2 . C3 H5 Cl O)x . x C3 H4 O2

CM 6

CRN 79-10-7

CMF C3 H4 O2



CM 7

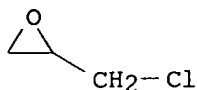
CRN 25068-38-6

CMF (C15 H16 O2 . C3 H5 Cl O)x

CCI PMS

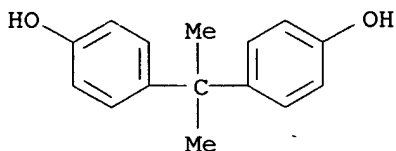
CM 8

CRN 106-89-8  
CMF C3 H5 Cl O



CM 9

CRN 80-05-7  
CMF C15 H16 O2

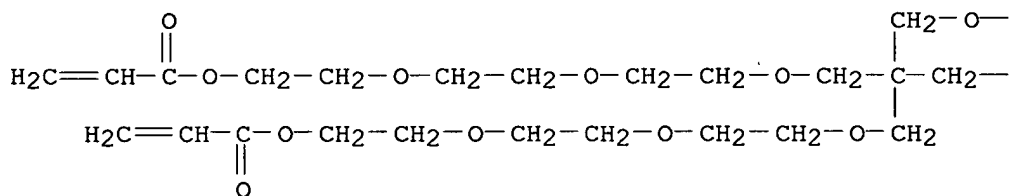


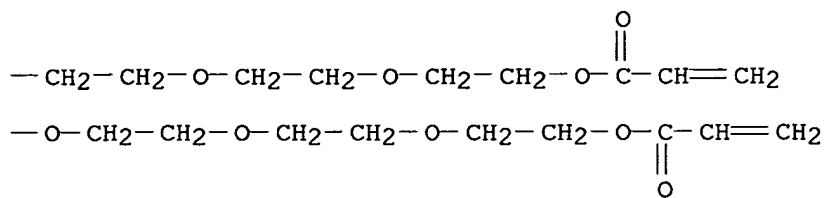
RN 125649-67-4 CAPLUS  
CN 2-Propenoic acid, [2,2-bis[[methyl-2-[(1-oxo-2-propenyl)oxy]ethoxy]methyl]-1,3-propanediyl]bis[oxy(methyl-2,1-ethanediyl)] ester, polymer with (chloromethyl)oxirane polymer with 4,4'-(1-methylethylidene)bis[phenol] 2-propenoate, hexamethyl-11,11-bis(trimethyl-12-oxo-2,5,8,11-tetraoxotetradec-13-en-1-yl)-3,6,9,13,16,19-hexaoxaheneicosane-1,21-diyl di-2-propenoate,  $\alpha$ -hydro- $\omega$ -[(1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), and tetramethyl-8,8-bis[[methyl-2-[methyl-2-[(1-oxo-2-propenyl)oxy]ethoxy]ethoxy]methyl]-3,6,10,13-tetraoxapentadecane-1,15-diyl di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 125649-66-3  
CMF C53 H92 O20  
CCI IDS

PAGE 1-A



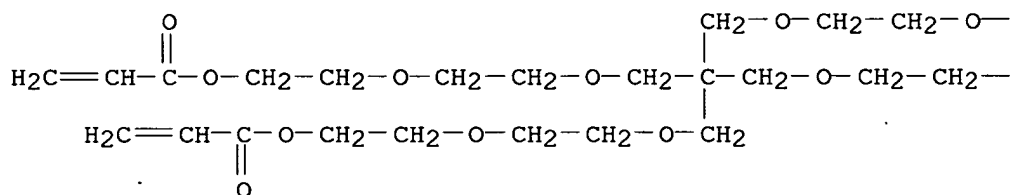


CM 2

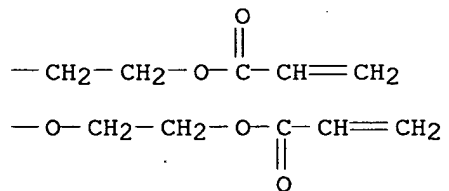
CRN 125649-65-2

CMF C41 H68 O16

CCI    IDS



8 ( D1-Me )

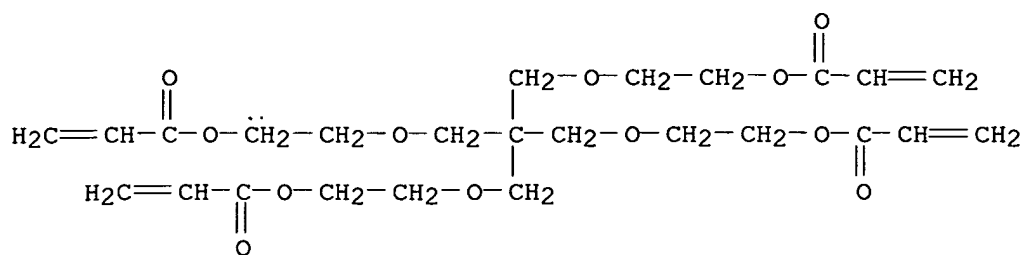


CM 3

CRN 125649-64-1

CMF C29 H44 O12

CCI    IDS



4 ( D1-Me )

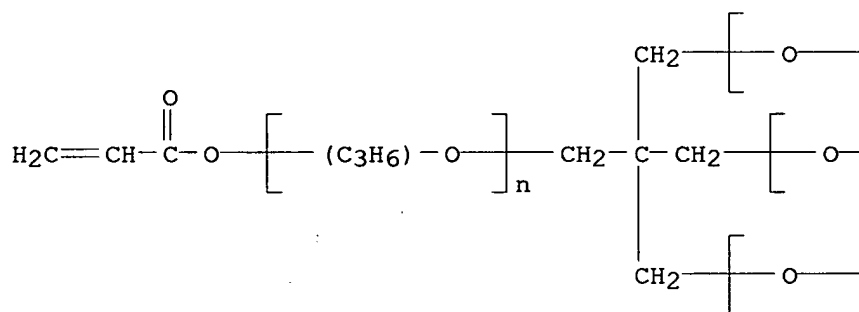
CM 4

CRN 53879-55-3

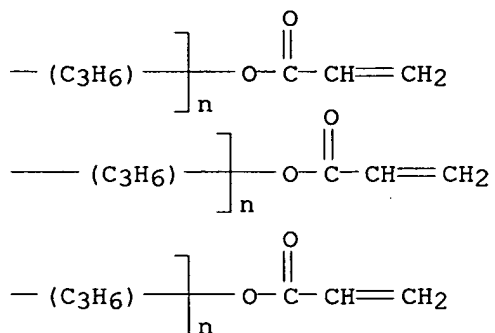
CMF (C3 H6 O)<sub>n</sub> (C3 H6 O)<sub>n</sub> (C3 H6 O)<sub>n</sub> (C3 H6 O)<sub>n</sub> C17 H20 O8

CCI IDS, PMS

PAGE 1-A



PAGE 1-B



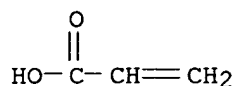
CM 5

CRN 55818-57-0

CMF (C15 H16 O2 . C3 H5 Cl O)<sub>x</sub> . x C3 H4 O2

CM 6

CRN 79-10-7  
CMF C3 H4 O2

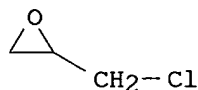


CM 7

CRN 25068-38-6  
CMF (C15 H16 O2 . C3 H5 Cl O)x  
CCI PMS

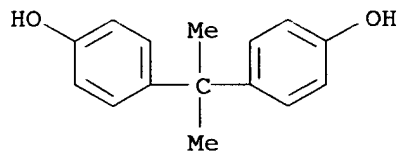
CM 8

CRN 106-89-8  
CMF C3 H5 Cl O



CM 9

CRN 80-05-7  
CMF C15 H16 O2



L20 ANSWER 14 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1983:541030 CAPLUS

DN 99:141030

TI Plasticizers for poly(vinyl butyral)

PA Sekisui Chemical Co. Ltd., Japan; Adeka Argus Chemical Co., Ltd.

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 58038741	A2	19830307	JP 1981-136637	19810831
	JP 01028776	B4	19890605		
				JP 1981-136637	19810831

AB Poly(vinyl butyral)(I) plasticized with compds. containing epoxide groups and ether linkages has improved heat stability and mech. properties, and durable transparency, unimpaired by plasticizer bleeding. Thus, a

1-mm-thick I (65% butyralized) sheet containing 35% (based on polymer) triethylene glycol diglycidyl ether [1954-28-5] had light transmittance and haze 96% and 6.2%, resp., when fabricated, and 91% and 26% after 18 h at 30° and 90% relative humidity.

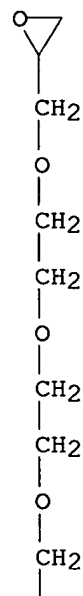
IT **87257-16-7P**

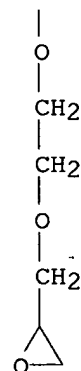
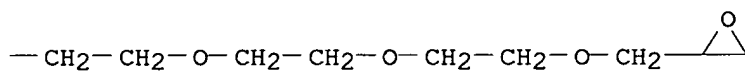
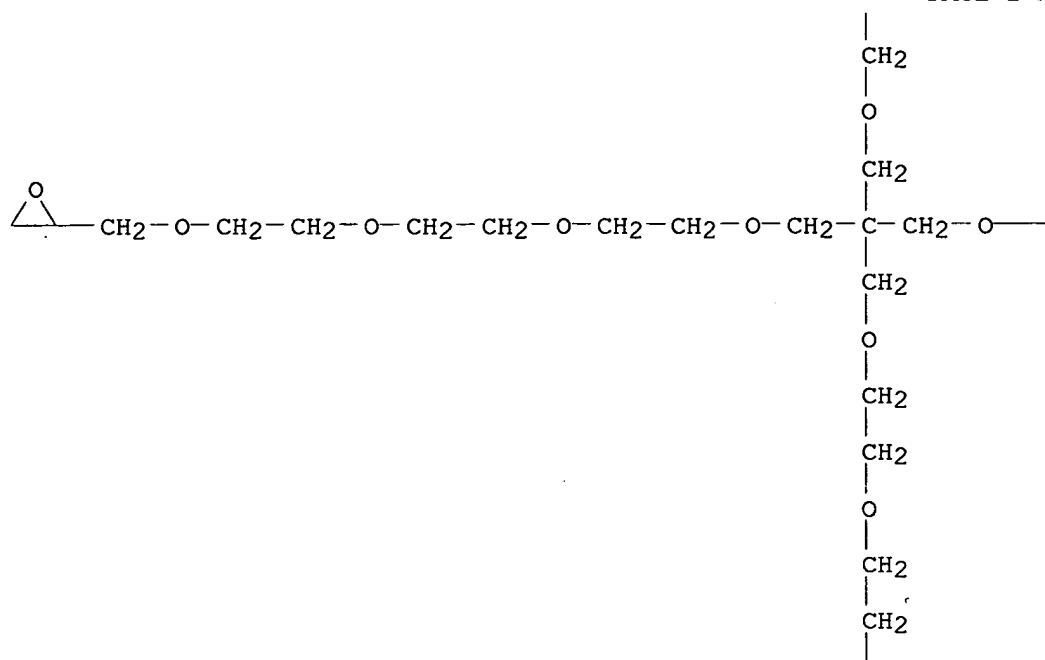
RL: PREP (Preparation)  
(preparation of)

RN 87257-16-7 CAPLUS

CN Oxirane, 2,2'-[13,13-bis(12-oxiranyl-2,5,8,11-tetraoxadodec-1-yl)-  
2,5,8,11,15,18,21,24-octaoxapentacosane-1,25-diyl]bis- (9CI) (CA INDEX  
NAME)

PAGE 1-A





L20 ANSWER 15 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1980:147063 CAPLUS

DN 92:147063

TI Synthesis of some polyethers from carbohydrate derivatives and related



L20 ANSWER 16 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1976:465092 CAPLUS

DN 85:65092

TI Adhesion of wet wood pieces

IN Nakatsuka, Ryuzo; Furuta, Mitsuo; Fukase, Toshimitsu; Kawahara, Nobuyoshi

PA Sumitomo Bakelite Co., Ltd.; Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 51041406	A2	19760407	JP 1974-112252	19741001
	JP 56051883	B4	19811208		

JP 1974-112252 A 19741001

AB Wood pieces containing >25% H<sub>2</sub>O are butt-jointed with quick-curing hydrophilic epoxy resin adhesives and heated quickly to 80-150° to give boards for manufacturing veneers. Thus, remnant wood board pieces of 2.5 mm thickness were butt-jointed with a mixture of tetraphenol tetraglycidyl ether polymer (mol. weight 800, epoxy equivalent 190) 40, bisphenol A diglycidyl ether polymer

[25085-99-8] (mol. weight 400, epoxy equivalent 180) 40, resorcinol diglycidyl ether polymer [29563-13-1] 20, pentaerythritol tetrakis(tripropylene glycol 2-hydroxy-3-mercaptopropyl monoether) ether [59810-43-4] 80, and triethylenediamine [280-57-9] 20 parts, heated 1 min between plates at 80-90°, and dried 40 min in an oven at 175° to give a board containing 8% H<sub>2</sub>O.

IT 59810-43-4

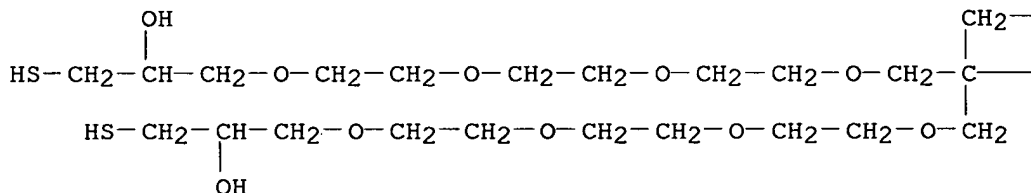
RL: MOA (Modifier or additive use); USES (Uses)

(crosslinking agents, for hydrophilic epoxy resin adhesives for wet wood)

RN 59810-43-4 CAPLUS

CN 4,7,10,13,17,20,23,26-Octaoxanonacosane-2,28-diol, 15,15-bis(13-hydroxy-14-mercaptoptrimethyl-2,5,8,11-tetraoxatetradec-1-yl)-1,29-dimercaptohexamethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



AN 1972:112722 CAPLUS

DN 76:112722

TI Perfluoropoly(ether esters) as lubricants and hydraulic fluids

IN Sterling, John D., Jr.

PA du Pont de Nemours, E. I., and Co.

SO U.S., 3 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
------------	------	------	-----------------	------

PI	US 3646112	A	19720229	US 1970-5991	19700126
				US 1970-5991	A 19700126

AB Reaction of (perfluoroalkoxy)acyl fluorides with (HOCH<sub>2</sub>)<sub>3</sub>Cet or (HOCH<sub>2</sub>)<sub>4</sub>C gave the corresponding esters. Thus, reaction of (HOCH<sub>2</sub>)<sub>3</sub>Cet with CF<sub>3</sub>CF<sub>2</sub>CF<sub>2</sub>O[C(CF<sub>3</sub>)FCF<sub>2</sub>O]<sub>n</sub>C(CF<sub>3</sub>)FCOF (n = 1) gave [CF<sub>3</sub>CF<sub>2</sub>CF<sub>2</sub>O[C(CF<sub>3</sub>)FCF<sub>2</sub>O]<sub>n</sub>C(CF<sub>3</sub>)FCO<sub>2</sub>CH<sub>2</sub>]<sub>3</sub>Cet. Other examples (8) with n = 1-14 were given.

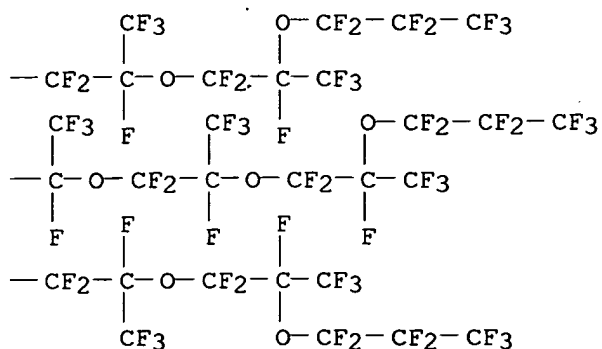
IT 34962-23-7P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 34962-23-7 CAPLUS

CN Propanoic acid, 2.

[1,1,2,3,3,3-hexafluoro-2-(heptafluoropropoxy)propoxy]propoxy]-  
2,2-bis[3-oxo-4,7,10-tris(trifluoromethyl)-2,5,8,11-tetraoxatetradec-1-yl]-  
1,3-propanediyl ester (9CI) (CA INDEX NAME)



=&gt; FIL STNGUIDE

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

90.28

964.96

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-12.41

-20.44

FILE 'STNGUIDE' ENTERED AT 14:52:12 ON 20 JAN 2005

USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT

COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE

AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Jan 14, 2005 (20050114/UP).

=&gt;

Connection closed by remote host

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1639MLS

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
NEWS 2 "Ask CAS" for self-help around the clock  
NEWS 3 SEP 01 New pricing for the Save Answers for SciFinder Wizard within  
STN Express with Discover!  
NEWS 4 OCT 28 KOREAPAT now available on STN  
NEWS 5 NOV 30 PHAR reloaded with additional data  
NEWS 6 DEC 01 LISA now available on STN  
NEWS 7 DEC 09 12 databases to be removed from STN on December 31, 2004  
NEWS 8 DEC 15 MEDLINE update schedule for December 2004  
NEWS 9 DEC 17 ELCOM reloaded; updating to resume; current-awareness  
alerts (SDIs) affected  
NEWS 10 DEC 17 COMPUAB reloaded; updating to resume; current-awareness  
alerts (SDIs) affected  
NEWS 11 DEC 17 SOLIDSTATE reloaded; updating to resume; current-awareness  
alerts (SDIs) affected  
NEWS 12 DEC 17 CERAB reloaded; updating to resume; current-awareness  
alerts (SDIs) affected  
NEWS 13 DEC 17 THREE NEW FIELDS ADDED TO IFIPAT/IFIUDB/IFICDB  
NEWS 14 DEC 30 EPFULL: New patent full text database to be available on STN  
NEWS 15 DEC 30 CAPLUS - PATENT COVERAGE EXPANDED  
NEWS 16 JAN 03 No connect-hour charges in EPFULL during January and  
February 2005  
NEWS 17 JAN 11 CA/CAPLUS - Expanded patent coverage to include Russia  
(Federal Institute of Industrial Property)  
  
NEWS EXPRESS JANUARY 10 CURRENT WINDOWS VERSION IS V7.01a, CURRENT  
MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),  
AND CURRENT DISCOVER FILE IS DATED 10 JANUARY 2005  
  
NEWS HOURS STN Operating Hours Plus Help Desk Availability  
NEWS INTER General Internet Information  
NEWS LOGIN Welcome Banner and News Items  
NEWS PHONE Direct Dial and Telecommunication Network Access to STN  
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that  
specific topic.

All use of STN is subject to the provisions of the STN Customer  
agreement. Please note that this agreement limits use to scientific  
research. Use for software development or design or implementation  
of commercial gateways or other similar uses is prohibited and may  
result in loss of user privileges and other penalties.

\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 19:01:43 ON 20 JAN 2005

=> fil medline biosis caplus embase wpids  
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
0.21	0.21

FULL ESTIMATED COST

FILE 'MEDLINE' ENTERED AT 19:02:28 ON 20 JAN 2005

FILE 'BIOSIS' ENTERED AT 19:02:28 ON 20 JAN 2005  
Copyright (c) 2005 The Thomson Corporation.

FILE 'CAPLUS' ENTERED AT 19:02:28 ON 20 JAN 2005  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'EMBASE' ENTERED AT 19:02:28 ON 20 JAN 2005  
COPYRIGHT (C) 2005 Elsevier Inc. All rights reserved.

FILE 'WPIDS' ENTERED AT 19:02:28 ON 20 JAN 2005  
COPYRIGHT (C) 2005 THE THOMSON CORPORATION

=> e newkome g?/au

E1	1	NEWKOME G/AU
E2	98	NEWKOME G R/AU
E3	0 -->	NEWKOME G?/AU
E4	2	NEWKOME GEORGE/AU
E5	401	NEWKOME GEORGE R/AU
E6	1	NEWKRIK K T/AU
E7	1	NEWKUMET C/AU
E8	7	NEWKUMET K M/AU
E9	1	NEWKUMET KATHLEEN M/AU
E10	1	NEWKUMET NANCY A/AU
E11	2	NEWLAN A/AU
E12	1	NEWLAND/AU

=> e1-e5

L1 502 ("NEWKOME G"/AU OR "NEWKOME G R"/AU OR "NEWKOME G?"/AU OR "NEWKO  
ME GEORGE"/AU OR "NEWKOME GEORGE R"/AU)

=> l1 and triethylene (w) glycol

L2 4 L1 AND TRIETHYLENE (W) GLYCOL

=> dup rem l2

PROCESSING COMPLETED FOR L2

L3 3 DUP REM L2 (1 DUPLICATE REMOVED)

=> t l3 1-3

L3 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:799910 CAPLUS

DN 142:6919

TI Synthesis of Water-Soluble, Ester-Terminated Dendrons and Dendrimers  
Containing Internal PEG Linkages

AU **Newkome, George R.**; Kotta, Kishore K.; Mishra, Amaresh;  
Moorefield, Charles N.

CS Departments of Polymer Science and Chemistry, Department of Chemisry,  
Maurice Morton Institute of Polymer Science, The University of Akron,  
Akron, OH, 44325-4717, USA

SO Macromolecules (2004), 37(22), 8262-8268  
CODEN: MAMOBX; ISSN: 0024-9297

PB American Chemical Society  
DT Journal  
LA English

RE.CNT 109 THERE ARE 109 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2003:495727 CAPLUS  
DN 139:351753  
TI Synthesis, spectroscopic and electrochemical investigation of some new stilbazolium dyes  
AU Mishra, Amaresh; Newkome, George R.; Moorefield, Charles N.; Godinez, Luis A.  
CS Departments of Polymer Science and Chemistry, Center for Molecular Design and Recognition, The University of Akron, Akron, OH, 44325-4717, USA  
SO Dyes and Pigments (2003), 58(3), 227-237  
CODEN: DYPIDX; ISSN: 0143-7208  
PB Elsevier Science Ltd.  
DT Journal  
LA English  
OS CASREACT 139:351753  
RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 1  
AN 2001:78436 CAPLUS  
DN 134:131973  
TI Performance of energy storage devices: potential areas for dendritic chemistry involvement  
IN Newkome, George R.  
PA University of South Florida, USA  
SO PCT Int. Appl., 48 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001007497	A2	20010201	WO 2000-US40431	20000720
	WO 2001007497	A3	20011101		
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	AU 2000071363	A5	20010213	AU 2000-71363	20000720
PRAI	US 1999-145785P	P	19990727		
	WO 2000-US40431	W	20000720		

=> d ibib abs 13 1-2

L3 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 2004:799910 CAPLUS  
DOCUMENT NUMBER: 142:6919  
TITLE: Synthesis of Water-Soluble, Ester-Terminated Dendrons and Dendrimers Containing Internal PEG Linkages  
AUTHOR(S): Newkome, George R.; Kotta, Kishore K.;

CORPORATE SOURCE: Mishra, Amaresh; Moorefield, Charles N.  
 Departments of Polymer Science and Chemistry,  
 Department of Chemisry, Maurice Morton Institute of  
 Polymer Science, The University of Akron, Akron, OH,  
 44325-4717, USA  
 SOURCE: Macromolecules (2004), 37(22), 8262-8268  
 CODEN: MAMOBX; ISSN: 0024-9297  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Dendrimers up to three generations, possessing internal PEG units within  
 the branching framework, were synthesized by a convergent approach via the  
 reaction of amine-based dendrons with 6,6-bis(4-chlorocarbonyl-2-oxabutyl)-  
 4,8-dioxaundecane-1,11-dicarbonyl chloride. These new constructs were  
 fully characterized, shown to exhibit good solubilities in organic as well as  
 aqueous solvents, and demonstrated to solubilize lithium triflate salts in  
 nonaq. environments, such as chloroform.  
 REFERENCE COUNT: 109 THERE ARE 109 CITED REFERENCES AVAILABLE FOR  
 THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE  
 FORMAT

L3 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 2003:495727 CAPLUS  
 DOCUMENT NUMBER: 139:351753  
 TITLE: Synthesis, spectroscopic and electrochemical  
 investigation of some new stilbazolium dyes  
 AUTHOR(S): Mishra, Amaresh; Newkome, George R.;  
 Moorefield, Charles N.; Godinez, Luis A.  
 CORPORATE SOURCE: Departments of Polymer Science and Chemistry, Center  
 for Molecular Design and Recognition, The University  
 of Akron, Akron, OH, 44325-4717, USA  
 SOURCE: Dyes and Pigments (2003), 58(3), 227-237  
 CODEN: DYPIDX; ISSN: 0143-7208  
 PUBLISHER: Elsevier Science Ltd.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 139:351753  
 AB The synthesis of some new solvatochromic mono-, bis-, and  
 tetrakisstilbazolium dyes is presented. The dyes were characterized by <sup>1</sup>H  
 and <sup>13</sup>C NMR and mass spectroscopies. The UV-vis spectroscopic  
 investigation of these compds. shows broad absorption bands (assigned to  
 intramol. charge transfer processes) in different solvents in the range of  
 450-520 nm. The electrochem. behavior of the dyes, on the other hand,  
 showed an irreversible reduction voltammetric wave that was postulated to  
 arise from the formation of a chemical reactive neutral radical species.  
 From the simulation of cyclic voltammetry measurements at different scan  
 rates, it was possible to compute thermodyn. potentials, electron transfer  
 rate consts., and diffusion coeffs. for all the compds. under study.  
 REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> FIL STNGUIDE		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	33.28	33.49
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-1.46	-1.46

FILE 'STNGUIDE' ENTERED AT 19:06:18 ON 20 JAN 2005

USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT  
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE  
AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.  
LAST RELOADED: Jan 14, 2005 (20050114/UP).

=> fil medline biosis caplus embase wpids

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.30	33.79

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-1.46

FILE 'MEDLINE' ENTERED AT 19:09:23 ON 20 JAN 2005

FILE 'BIOSIS' ENTERED AT 19:09:23 ON 20 JAN 2005  
Copyright (c) 2005 The Thomson Corporation.

FILE 'CAPLUS' ENTERED AT 19:09:23 ON 20 JAN 2005  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'EMBASE' ENTERED AT 19:09:23 ON 20 JAN 2005  
COPYRIGHT (C) 2005 Elsevier Inc. All rights reserved.

FILE 'WPIDS' ENTERED AT 19:09:23 ON 20 JAN 2005  
COPYRIGHT (C) 2005 THE THOMSON CORPORATION

=> d his

(FILE 'HOME' ENTERED AT 19:01:43 ON 20 JAN 2005)

FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE, WPIDS' ENTERED AT 19:02:28 ON 20  
JAN 2005

E NEWKOME G?/AU  
L1 502 E1-E5  
L2 4 L1 AND TRIETHYLENE (W) GLYCOL  
L3 3 DUP REM L2 (1 DUPLICATE REMOVED)

FILE 'STNGUIDE' ENTERED AT 19:06:18 ON 20 JAN 2005

FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE, WPIDS' ENTERED AT 19:09:23 ON 20  
JAN 2005

=> d hitstr l3 3

L3 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 1

=> logoff

ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF  
LOGOFF? (Y)/N/HOLD:y\  
'Y\' IS NOT VALID HERE  
For an explanation, enter "HELP LOGOFF".

=> logoff y

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
----------------------	---------------------	------------------

FULL ESTIMATED COST	7.45	41.24
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-1.46

STN INTERNATIONAL LOGOFF AT 19:10:44 ON 20 JAN 2005